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# ENVIRONMENTAL ASSESSMENT BOARD

VOLUME:

133

DATE: Monday, September 11th, 1989

BEFORE: M.I. JEFFREY, Q.C., Chairman

E. MARTEL, Member

A. KOVEN, Member



FOR HEARING UPDATES CALL (TOLL-FREE): 1-800-387-8810



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2300 Yonge St., Suite 709, Toronto, Canada M4P 1E4



EA-87-02

HEARING ON THE PROPOSAL BY THE MINISTRY OF NATURAL RESOURCES FOR A CLASS ENVIRONMENTAL ASSESSMENT FOR MANAGEMENT ON CROWN LANDS IN ONTARIO

TIMBER

IN THE MATTER of the Environmental Assessment Act, R.S.O. 1980, c.140;

- and -

IN THE MATTER of the Class Environmental Assessment for Timber Management on Crown Lands in Ontario:

- and -

IN THE MATTER OF a Notice by the Honourable Jim Bradley, Minister of the Environment, requiring the Environmental Assessment Board to hold a hearing with respect to a Class Environmental Assessment (No. NR-AA-30) of an undertaking by the Ministry of Natural Resources for the activity of timber management on Crown Lands in Ontario.

Hearing held at the Ramada Prince Arthur Hotel, 17 North Cumberland St., Thunder Bay, Ontario, on Monday, September 11th, 1989, commencing at 1:00 p.m.

VOLUME 133

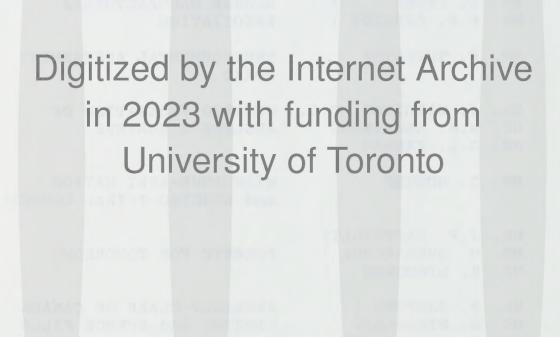
#### BEFORE:

MR. MICHAEL I. JEFFERY, Q.C. Chairman MR. ELIE MARTEL MRS. ANNE KOVEN

Member Member

### APPEARANCES

MS.	V. FREIDIN, Q.C.) C. BLASTORAH K. MURPHY Y. HERSCHER )	MINISTRY OF NATURAL RESOURCES
MR. MS.	B. CAMPBELL ) J. SEABORN )	MINISTRY OF ENVIRONMENT
MR. MR. MS. MR.	R. TUER, Q.C.) R. COSMAN ) E. CRONK ) P.R. CASSIDY )	ONTARIO FOREST INDUSTRY ASSOCIATION and ONTARIO LUMBER MANUFACTURERS' ASSOCIATION
MR.	H. TURKSTRA	ENVIRONMENTAL ASSESSMENT BOARD
MR.		ONTARIO FEDERATION OF ANGLERS & HUNTERS
MR.	D. HUNTER	NISHNAWBE-ASKI NATION and WINDIGO TRIBAL COUNCIL
MS.	J.F. CASTRILLI) M. SWENARCHUK ) R. LINDGREN )	FORESTS FOR TOMORROW
MR. MS. MR.	P. SANFORD ) L. NICHOLLS) D. WOOD )	KIMBERLY-CLARK OF CANADA LIMITED and SPRUCE FALLS POWER & PAPER COMPANY
MR.		ONTARIO FEDERATION OF LABOUR
MR.	R. COTTON	BOISE CASCADE OF CANADA LTD.
	Y. GERVAIS) R. BARNES )	ONTARIO TRAPPERS ASSOCIATION
	R. EDWARDS ) B. McKERCHER)	NORTHERN ONTARIO TOURIST OUTFITTERS ASSOCIATION



(ii)

#### APPEARANCES: (Cont'd)

MR. L. GREENSPOON)

MS. B. LLOYD )

MR. R. REILLY

	J.W. ERICKSON, Q.C.) B. BABCOCK )	RED LAKE-EAR FALLS JOINT MUNICIPAL COMMITTEE
	D. SCOTT ) J.S. TAYLOR)	NORTHWESTERN ONTARIO ASSOCIATED CHAMBERS OF COMMERCE
	J.W. HARBELL) S.M. MAKUCH )	GREAT LAKES FOREST
MR.	J. EBBS	ONTARIO PROFESSIONAL FORESTERS ASSOCIATION
MR.	D. KING	VENTURE TOURISM ASSOCIATION OF ONTARIO
MR.	D. COLBORNE	GRAND COUNCIL TREATY #3

MR. H. GRAHAM CANADIAN INSTITUTE OF

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MR. G.J. KINLIN DEPARTMENT OF JUSTICE

MR. S.J. STEPINAC MINISTRY OF NORTHERN DEVELOPMENT & MINES

MR. M. COATES ONTARIO FORESTRY ASSOCIATION

MR. P. ODORIZZI BEARDMORE-LAKE NIPIGON WATCHDOG SOCIETY

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APPEARANCES: (Cont'd)

MR. R.L. AXFORD CANADIAN ASSOCIATION OF

SINGLE INDUSTRY TOWNS

MR. M.O. EDWARDS FORT FRANCES CHAMBER OF

COMMERCE

MR. P.D. McCUTCHEON GEORGE NIXON

MR. C. BRUNETTA NORTHWESTERN ONTARIO

TOURISM ASSOCIATION

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Exhibit No.	Description	Page No.
807	Article entitled: Economics Applications, Ontario Lake of the Woods Fishery: Economic and Socia Analysis, by A.J. Usher.	
808	Article entitled: Rationale for forest reserves around lakes, published in Lake Line, Vol. 3(2)	
809	Copy of letter to Ms. Judy Taggart, Editor, Lake Line from J.E. Hanna, dated October 14, 198	22661



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1 --- Upon commencing at 1:10 p.m.
 2
                 THE CHAIRMAN: Good afternoon. Be seated, please.
 3
                 Mr. Cassidy, I understand you have something to
   speak to us about?
 5
                               Yes. Thank you, Mr. Chairman.
                 MR. CASSIDY:
 6
                 I intend to be brief. Again, I am appearing
 7 before you asking for clarifications and actually this
   morning -- or this afternoon I appear for the purpose of asking
 9 for a Board direction with respect to the service of my client's
10 witness statements. We are now getting to the stage where we
11 need some direction from the Board in terms of actual dates.
12
                 If I could commence my comments this morning by
   just referring you to the Board's order dated September 16th,
13
   1988, and I can just deal very quickly with the particular
14
   section which is relevant to this subject matter and; that is,
15
   Section 5 subsection (a) which states that:
16
17
                  "The OFIA/OLMA shall distribute all of
18
                 its witness statements to the Board and
19
                 parties receiving full-time
20
                 correspondence prior to the completion of
21
                 MNR's case, with the OFIA/OLMA's first
22
                 witness panel's statement having been
23
                 delivered at least 60 days prior to the
24
                 completion of MNR's case."
25
                 That requires us to have the need to come before
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1	MNR's case, with the OFIA/OLMA's first
2	witness panel's statement having been
3	delivered at least 60 days prior to the
4	completion of MNR's case."
5	That requires us to have the need to come
6	before you today to ask for some firm dates given the
7	logistics involved with serving over 30 full-time
8	parties and a number of other individuals in respect of
9	our evidence.
10	I am asking for specific dates and a
11	direction in that regard and I have a proposal to make,
12	Mr. Chairman, for your consideration. It is made in
13	light of the discussions that I have had with MNR and
14	in light of the submissions made by Mr. Freidin some
15	time ago, I believe it was on August 22nd, when he
16	estimated that the MNR's case would finish at
17	approximately November 15th, whereupon you indicated
18	that OFIA/OLMA case would not commence earlier than
1.9	January 9th, 1990.
20	In a subsequent discussion I've had today
21	with Mr. Freidin it appears that there may be some

In a subsequent discussion I've had today with Mr. Freidin it appears that there may be some doubt about the November 15th date being met in terms of the completion of the MNR's case, however, I think that still is in a ballpark area and, for the following -- for that reason, I would like to make the

following proposal in order that we might obtain direct dates.

First of all, if you could order that my clients provide all of our witness statements to the other parties no later than December 1, 1989 - that's a Friday - with the further order pursuant to the spirit of Section 5 subsection (a) that the OFIA's first two witness statements be filed by the OFIA/OLMA and served on the other parties no later than Monday, October 2nd, 1989 which preserves the 60-day period, accounts for any possible change in the length of time it might take to complete MNR's case and also, I believe, would provide the parties with, if we start our evidence on January 9th, as we hoped we do, with over three months' notice of the first two panels.

You may be asking why I am proposing the first two when the Board's original order was only one. The reason for that is that the evidence is very related with our first two panels and we feel that it would make sense for not only the presentation of our evidence but the understanding of it by the Board and the other parties if those two panels were served together, and for that reason we propose to do that.

The remainder of the OFIA/OLMA witness statements will, of course, be served from October 2nd

1	through to December 1, 1989.
2	If I could request those directions and
3	subject to any comments any of the other parties make,
4	it appears to me there would be no prejudice to the
5	other parties, but it would greatly help us in the
6	logistical planning of our evidence.
7	THE CHAIRMAN: Thank you, Mr. Cassidy.
8	Well, some of the considerations
9	before we give some definite dates, we would first of
10	all like to hear from the other parties but, secondly,
11	some of the considerations will revolve around the
12	availability of Dean Baskerville and when we are going
13	to actually entertain his evidence.
L 4	The Board hasn't had any further
L5	conversations with Mr. Turkstra as to the precise dates
L 6	when Dean Baskerville might be ready.
L7	MR. CASSIDY: Mm-hmm.
L 8	THE CHAIRMAN: And the Board doesn't know
L9	whether any of the parties are aware of anything
20	further, particularly the proponent in that regard.
21	Ms. Blastorah, are you aware of any
22	further discussions with respect to when Dean
23	Baskerville might be available?
24	MS. BLASTORAH: I am not personally, Mr.
25	Chairman. I honestly can't say whether Mr. Freidin or

Ms. Murphy have been involved in any such discussions, 1 2 but I can certainly find out and let you know. 3 THE CHAIRMAN: Okay. And do you have any 4 better information at this time as to when you might be 5 completed your case? 6 MS. BLASTORAH: I'm afraid I don't, given 7 the change in the sitting hours. I am just not sure how that will affect things. 8 9 For instance, if we were to lose a day it 10 could now be a significant loss. If through illness or 11 unavoidable circumstances we lost one full day of that 12 length, it could substantially change matters. Apart from that, I don't really know. 13 14 It's rather hard to project at this point how that will 15 affect the number of days projected that we had for 16 Panel 15, because the days were projected on the basis 17 of some short days. I think that we are estimating 18 Panel 16 may start mid-October but, again, that's 19 strictly a ballpark estimate. 20 THE CHAIRMAN: Okay. Mr. Cassidy, suppose that Dean Baskerville was unavailable to be 21 22 slotted in immediately after the Ministry's and suppose 23 the Ministry did in fact complete their case around November 15th -- in and around that area, what happens 24

then?

1	MR. CASSIDY: Well, Mr. Chairman, I can
2	advise that if you wish to make a term of the order
3	that if the Ministry completes its case by November
4	15th and Dean Baskerville is not available on a certain
5	period of notice, if we could find out perhaps by the
6	end of this week or the end in two weeks, I might
7	suggest that we make the date November 15th, it would
8	be onerous but, however, we are here to help the Board
9	in terms of getting the evidence move along.
10	THE CHAIRMAN: See, the two choices I
11	think the Board has in that event and I think it's
12	the Board's preference that we deal with Dean
13	Baskerville immediately subsequent to the Ministry's
14	case - but, of course, we don't want to lose any
15	additional hearing time than we otherwise can avoid.
16	I doubt whether the Board would be
17	sitting beyond December 15th in any event given the
18	holidays coming up and given the fact that many of the
19	parties are away from their homes.
20	Nevertheless, if Dean Baskerville were
21	unable to attend and your client could not field the
22	first panel or the first two panels, for some reason,
23	we might also consider another satellite location to
24	fill in some of that time.
25	MR. CASSIDY: I believe there was

discussion about that on August 22nd, Mr. Chairman. I can advise now that the reason that we need these directions is because of scheduling problems with our witnesses which was accommodated partially by the start date of January 9th. It would be - I regret in front of the Board - impossible to move our first panel before that date given the planning that has occurred since August 22nd and since the difficulties with those witnesses arose out of the fact that they would be unavailable before that date.

However, I can indicate that we would be prepared to move up the service of the witness statements if that would at all help or the service of the last day.

I should further indicate that with respect to the service of the first statement, the reason I rise this morning is that if there was no doubt about when we would finish the MNR's case, then it potentially would have been required to serve the first witness statement this Friday, which is why I need clarification.

I can advise the Board that we have the second witness statement completed, but because of juggling with scheduling problems, we would rather serve the first witness statement obviously first and

it would not be able to be completed until October 2nd. 1 It was our intention to have that completed by October 2 2nd, it was going to be our - this is getting rather 3 confusing - it was going to be our second witness 4 statement. Because of juggling problems, we've now 5 reversed the order and we would prefer to serve them 6 all at once on October 2nd. 7 MS. BLASTORAH: Mr. Chairman, I don't 8 know whether this is of assistance because it's 9 10 basically speculation at this point, but I think there is a very good chance that we won't be finished Panel 11 12 16 perhaps before mid-November and in fact will be 13 toward the break period that you have indicated before 14 the Ministry's case would be completed given the change 15 in sheduling and the timing that we've had with Panels 16 12 and 13. 17 And so I think that we are perhaps on a little later stage than we anticipated with Panel 14 at 18 19 this point, so... 20 THE CHAIRMAN: All right. Well, why 21 don't we leave it like this: We will discuss it 22 amongst the Board members over the break as to the 23 precise dates. I guess at this point it would be in 24 order to hear from any other parties?

Are there any objections from any other

1	parties as to the proposal put forward by Mr. Cassidy
2	of serving the first and second panels by October 2nd
3	and the remainder of the panels by December
4	MR. CASSIDY: Friday, December 1st.
5	October 2nd is a Monday.
6	(no response)
7	Discussion off the record
8	THE CHAIRMAN: Well, I think what we'll
9	do, Mr. Cassidy, there is only two other parties here
10	at the moment. I think we will hold this down, if you
11	don't mind, to a Wednesday when the other parties will
12	be here and then fix a date.
13	MR. CASSIDY: Fine.
14	THE CHAIRMAN: The Board's preliminary
15	view is that it does not seem to be much of a problem,
16	given the fact that if the Ministry does not in fact
17	finish prior to the break, we may well be entertaining
18	Dean Baskerville in January as well.
19	And, again, that will push off the start
20	of your case perhaps a little further down the line,
21	but and I realize that may cause sheduling problems
22	for you again.
23	MR. CASSIDY: Well, if we have to deal
24	with it, we have to deal with it.
25	MR. CHAIRMAN: But we have to deal with

1	many of these witnesses as they become available
2	MR. CASSIDY: That's right.
3	MR. CHAIRMAN:and, particularly, I
4	think Dean Baskerville because of his role in this
5	whole scenario being fitted in after the Ministry's
6	case.
7	MR. CASSIDY: Thank you, Mr. Chairman. I
8	appreciate the difficulties with getting fixed dates
9	and that's why I thought I would bring it to your
.0	attention now.
.1	THE CHAIRMAN: Well, we should be able to
.2	give you a fixed date by Wednesday at the latest and
.3	we'll discuss it amongst ourselves and perhaps any of
. 4	you might discuss it with any of the other parties that
. 5	become available before that date.
. 6	MR. CASSIDY: Thank you.
.7	MS. BLASTORAH: Mr. Chairman, I'll
. 8	attempt to get some better advice from Mr. Freidin
.9	before Wednesday as to how we project for
20	evidence-in-chief then.
21	THE CHAIRMAN: All right. But I think
22	we'll have to stick by our earlier ruling, Mr. Cassidy,
23	that your first two panels would not go on earlier than
24	January 9th.

MR. CASSIDY: Thank you, Mr. Chairman.

1	THE CHAIRMAN: Although it may be later
2	than that too.
3	MR. CASSIDY: We intend to have those
4	panels dealt with separately.
5	THE CHAIRMAN: All right.
6	MR. CASSIDY: In other words, we want
7	to
8	THE CHAIRMAN: So the first panel will
9	start January 9th. How many panels do you have, out of
10	curiosity?
11	MR. CASSIDY: I thought you might ask
12	that. The present intention is nine with the
13	possibility of a tenth, that depends very much on the
14	remainder of MNR's evidence, of course.
15	THE CHAIRMAN: I'm reluctant to even ask
16	for a ballpark figure in terms of months. I assume
17	we're talking months, not years here?
18	MR. CASSIDY: We are talking months in
19	terms of what we anticipate the cross-examination to
20	be, which is not easily done; however having had a year
21	of seeing cross-examinations, if you take the ballpark
22	to be the size of Yellowstone Park, I would say four
23	months.
24	THE CHAIRMAN: To complete your evidence
25	completely?

THE CHAIRMAN: Okay.  MR. CASSIDY: Thank you, Mr. Chairman.  look forward to you speaking to the matter again on  Wednesday.  THE CHAIRMAN: Thank you.  Any other preliminary matters to deal  with?  MR. ADAMSON: Mr. Chairman, one item I  would like to clarify from last week.  THE CHAIRMAN: Yes.  MR. ADAMSON: In response to a question  from Ms. Kleer I indicated that the Nishnawbe-Aski  Nation had opportunity to comment on the environmental  guidelines before they were published. I have since	I
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Nation had opportunity to comment on the environmental	
guidelines before they were published. I have since	
16 checked our list of people to whom the draft were sent	
and, in fact, they did not have an opportunity to	
18 comment.	
19 THE CHAIRMAN: So NAN did not have an	
20 opportunity?	
MR. ADAMSON: That's right, NAN did not	
have an opportunity.	
THE CHAIRMAN: Thank you. Was there as	Ϋ́
reason given for that?	
MR. ADAMSON: I guess it goes back wh	

1	wouldn't we send it? I guess we felt that it didn't
2	really relate to their interest, considering the nature
3	of the guidelines and the type of construction,
4	maintenance, things that are in it.
5	THE CHAIRMAN: Thank you.
6	Mr. Hanna?
7	BRUCE ADAMSON,
8	SERGE TENAGLIA, NEVILLE WARD,
9	GORDON PYZER,  DAVID M. HOGG, Recalled
10	MR. HANNA: Mr. Chairman, this afternoon
11	I will be dealing with, primarily I expect, Mr. Pyzer
12	and Mr. Ward. I will be starting with Mr. Pyzer and
13	going through his evidence in Document No. 5 and,
14	likewise, I will be following through Mr. Ward's
15	evidence in, I believe it's Document No. 3 or 4 in the
16	witness statement.
17	I would like first however to get some
18	preliminary matters and make sure I get my questions to
19	the right people in the panel and that's why I would
20	like to start out with that.
21	CONTINUED CROSS-EXAMINATION BY MR. HANNA:
22	Q. Can I ask who is the quarterback in
23	this panel?
24	MR. PYZER: I believe I am.
25	Q. Well, Mr. Pyzer, then we will be

1 talking continuously then.

Now, it's my understanding that this

panel deals with the how-to-its and the consequences of

the how-to-its in terms of forest access roads and that

Panel 15 will be dealing with the overall planning

process and how it fits into that; is that correct?

A. That's correct.

Q. So in terms of the evidence of this panel, it provides basic inputs to the planning process that will be described in terms of Panel 15, it lays out, if you will, the groundwork upon which that planning process is founded?

A. That's correct. Generally, yes.

Q. Now, I want to make sure that my interpretation of what you're passing on to Panel 15 is consistent with yours, and what I'm looking at - and I have this particular concept and maybe it's not consistent with yours - but I have this concept that Panel 15 in the timber management planning process is attempting to arrive at optimal resource management decisions with respect to timber management planning; is that your understanding?

A. That is, but I am going to ask Mr. Tenaglia here to turn his mike on because he is -- while I may be the quarterback, he's the planning

- 1 expert on this panel.
- Q. Okay, fine. Sure.
- MR. TENAGLIA: A. In terms of -- yes, we
- 4 are looking at the optimal decisions, decision-making,
- 5 which is the preferred corridor, which is the preferred
- 6 route to pick in terms of access.
- 7 Q. Right. In fact it's the whole road
- 8 network that you are trying to optimize; is that not
- 9 correct?
- 10 A. That's correct.
- Q. Now, perhaps -- I'm not -- Mr.
- 12 Tenaglia, either you or Mr. Pyzer can field these
- questions, I'm just not sure which of the two is the
- 14 appropriate person.
- MR. PYZER: A. We've been known to try
- 16 both at the same time.
- 17 Q. I think the recorder might not like
- 18 that. Okay. I have listed here five things that I
- 19 conceive that this panel might provide as input to
- 20 Panel 15 in terms of the overall planning process, and
- 21 I want to see if these are consistent, in your view, as
- the information that might be passed on.
- The first thing -- perhaps just one more
- thing. In passing this information on; again, I come
- at this with a certain concept of what is required to

make an optimal decision, particularly with respect to 1 forest access road networks, and so it's specifically 2 with respect to that that I'm talking. 3 The first thing is this road construction 4 costs both over the short- and long-term. Would you 5 6 agree that that's an essential element in arriving at 7 an optimum decision? 8 MR. TENAGLIA: A. Yes, it is. 9 The second thing I have here is road maintenance costs over both the short- and long-term? 10 11 Yes. Α. 12 Now, the third thing here I realize 13 may not be the essence of the evidence of this panel, 14 but just for completeness I've included it, and that is the net value of the wood accessed? 15 16 Α. That certainly would have a bearing 17 on decisions that are made. 18 The fourth thing is the net public Q. 19 value of all other timber resource opportunities 20 created by road network alternatives? 21 MR. PYZER: A. And the question is...? 22 Q. Is that an essential input to 23 arriving at an optimal forest access road network 24 system?

Α.

The net public value of all other --

1 I'm sorry, I'm just trying to... 2 Q. I can read it again. It's the net 3 public value of other timber resource opportunities created by the road network. 4 That's a consideration, yes. 5 Α. 6 Excuse me, Mr. Quinney just corrected 0. 7 me -- Dr. Quinney has corrected me here. I think I said other timber, I meant non-timber resource 8 9 opportunities. I'm sorry if I -- that was the intent 10 of the question. Would that be a necessary input? 11 A. It would be something we would look 12 at, yes. 13 Q. Could you arrive at an optimal 14 decision without that input? 15 Well, it all depends what you mean by 16 the term 'net public value'. 17 Well, how do you interpret that? 18 I find it very difficult, I'm not sure what you mean by it. How I would interpret it in 19 terms of how we do -- how we make decisions and how we 20 rationalize and evaluate or make that analysis, I would 21 22 say, yes, that's a necessary input. I just don't know 23 if I'm interpreting it the same way you are. 24 Q. Well, perhaps we will come to the 25 issue of value. You are saying there may be some

semantical difference in terms of the concept of value 1 2 there? 3 Α. That's correct. And the fifth thing that I had listed 4 5 here was the environmental costs in terms of non-timber 6 values. 7 Yes, I would think that's a major Α. consideration. 8 Are there any others that are omitted 9 from this list of five? 10 11 MR. TENAGLIA: A. You certainly would 12 have to assess what the impacts of the road network 13 would be on any resource user. So impacts -- potential 14 impacts is a consideration, if that fits in one of 15 your... 16 Okay. I had broken this out the way 0. 17 I had, Mr. Tenaglia, specifically to try and deal with 18 that issue. I had No. 4, in terms of net public value, 19 the interpretation there was that you might have 20 positive impacts from forest access roads and, 21 therefore, that would be where the positive user 22 impacts, in your terms, might be incorporated. Can you 23 live with that? 24 Α. Yes.

Q.

And the negative user impacts and

negative impacts on the environment would be captured 1 2 in No. 5, the environmental costs? 3 Α. Okay. 4 0. Now, is there any others that are not included in that list? 5 MR. PYZER: A. I would suspect not. I 6 7 guess the difficulty all of us will probably have on this panel is that we don't think in terms of these 8 9 five categories. 10 The words are somewhat foreign, at least 11 they are to me, but in terms of what we do deal with, I 12 believe I can slot that into each one of your five 13 categories. 14 Q. Okay. Now, I would like to ask - so I can direct my questions properly to the panel - who I 15 16 should deal with for each one of these five components? 17 A. Possibly the easiest way would simply 18 be to ask the guestion and then when we hear it -- if 19 you're talking about -- obviously the very specific, 20 the engineering side of it, road maintenance costs long-, short-term, those sorts of things, certainly 21 that's Mr. Adamson's area that he would be speaking to; 22 but environmental costs, impact on fish and wildlife, 23 if it's fish we're -- certainly that's Mr. Ward's area 24

of expertise; if it's wildlife, Mr. Hogg's; and Mr.

Tenaglia is certainly the expert in terms of process in 1 timber management and impacts relative to the forest 2 3 industry. In terms of dealing with other user 4 5 groups, whether they be anglers, hunters, Indians, tourist operators, those are the kinds of questions 6 7 that you can direct to me. 8 Q. All right. Well, Mr. Pyzer, how 9 about if we deal with you then. 10 MR. HANNA: Excuse me. ---Discussion off the record 11 12 MR. HANNA: Q. Mr. Pyzer, I believe in 13 your witness statement in Panel 7 your curriculum vitae 14 was not included in the witness statement; is that 15 correct. 16 MR. PYZER: A. I was in Panel 7, so I 17 assume that the reason it wasn't duplicated was because 18 I was sworn and it was included in Panel 7. 19 Q. Okay. I'm just trying to figure out 20 if your CV has been filed? 21 Α. Yes, it has. 22 It has been? Q. 23 Yes. Α. 24 Q. Okay. 25 MR. HANNA: Mr. Chairman, I don't know

how to refer to these exhibits because I don't have the 1 2 file number, but I believe it has been filed. I don't think it's necessary for the 3 4 Board to look at it specifically, but I'm going to ask 5 the witness several questions on his curriculum vitae, if I can. 6 7 MS. BLASTORAH: Mr. Chairman, I can't lay 8 my hand on the exhibit number right now, but we accept 9 that it was filed and perhaps we can just refer to it 10 as the curriculum vitae of Mr. Pyzer. 11 THE CHAIRMAN: That would be fine. 12 MS. BLASTORAH: I will try and locate the exhibit number. 13 14 THE CHAIRMAN: Okay. 15 MR. HANNA: Q. Mr. Pyzer, do you have a 16 copy of your resume with you? 17 MR. PYZER: A. No, I don't. 18 0. (handed) 19 Thank you. Α. 20 Q. Now, I have gone through your resume 21 and it certainly is clear that you are a very active 22 member of a number of different organizations and 23 advance -- you're writing books on fishing, conducting 24 radio shows, appearing on TV regularly; is that

25

correct?

1	A. Yes.
2	Q. And I also see that you've been
3	involved in a great number of Ministry committees; is
4	that correct?
5	A. Fewer in the last year, but previous
6	to that, yes.
7	Q. However, I went through that
8	voluminous supplement - it was certainly quite useful
9	in getting an appreciation of your history - but I
10	didn't find any reference to any scientific articles
11	that you published. Was that omitted out of your
12	supplement?
13	A. Scientific articles?
14	Q. Yes.
15	A. Other than thesis work, that sort of
16	thing, I haven't published very much, no.
17	Q. So it's fair to say you've had a
18	great deal admini a great deal of experience as an
19	administrator but virtually no experience, at least
20	since 1970, undertaking and publishing any form of
21	scientific research on socio-economic analysis or
22	anything else of professional value?
23	A. That's correct, I haven't published
24	anything.
25	MS. BLASTORAH: Mr. Chairman, I don't

1 want to rise prematurely, I just want to clarify. Hanna had indicated during the scoping session that he 2 3 was not going to be challenging the qualifications of 4 this witness and I just want to clarify that that's 5 still his position. 6 MR. HANNA: Mr. Chairman, I'm not 7 challenging the qualifications of this witness as an 8 expert in resource management. I believe he is here 9 speaking on socio-economic impacts and I'm exploring 10 his capabilities in that field. 11 MS. BLASTORAH: I would just like to 12 confirm exactly what Mr. Pyzer was qualified as. 13 Well, I will just leave it and see where 14 the questioning goes, Mr. Chairman. 15 MR. HANNA: I did, Mr. Chairman, look 16 very carefully at the qualifications of Mr. Pyzer in 17 Panel 7 and in panel -- and in this particular panel, and it was for that reason that I made the statement in 18 19 the scoping session. 20 Q. Mr. Pyzer, can I take you back in 21 your memory to Panel 7. I think a lot of us here may 22 have a hard time remembering that far back, perhaps you 23 do too. 24 There was a number of questions put to 25 you at that time in terms of your experience as a

Ministry employee regarding training in optimization of

1

resource benefits. Do you recall that? 2 MR. PYZER: A. I recall some questions, 3 4 yes. 5 I'm going to be speaking specifically 0. 6 to certain pages, and perhaps you might want to refer 7 to the transcript. I'm looking at pages --8 MS. BLASTORAH: Which volume? MR. HANNA: Volume 57, page 10158. 9 10 believe it runs through to 10161. You might want to 11 look at that to refresh your memory. 12 MS. BLASTORAH: Mr. Chairman, I don't 13 want to be disruptive, but I have a slight problem, and 14 I know it was unfortunate that Mr. Hanna did not get 15 here until this morning so he was unable to advise us before the commencement of the hearing which exhibits 16 17 he would be referring to. I have some concern that I'm 18 going to have to give my only copy of the transcript to 19 the witness, I don't have a copy for my own purposes. 20 So I would just raise that now and if it appears to be a problem, I may ask that we hold over 21 22 this line of questioning until we are able to obtain a 23 copy of the transcript. 24 THE CHAIRMAN: Okay. Mr. Hanna, going 25 back to the evidence given in Panel 7, how long are we

1	going to remain on Panel 7's evidence?
2	MR. HANNA: It won't be very long, Mr.
3	Chairman. It's a matter of about five or six
4	questions.
5	THE CHAIRMAN: Well, let's proceed as
6	expeditiously as we can to see where we are going.
7	MR. HANNA: Yes, Mr. Chairman.
8	MR. PYZER: I am sorry, what pages were
9	those again?
10	MR. HANNA: Q. If you could look first
11	on page 10160, please.
12	MR. PYZER: A. I don't have that
13	document here. It must be the next one.
14	MS. BLASTORAH: (handed)
15	MR. PYZER: 10?
16	MS. BLASTORAH:160. What volume is
17	that, Mr. Pyzer?
18	MR. PYZER: 59.
19	MR. HANNA: Q. I'm looking specifically
20	at lines 9 through 17.
21	MR. PYZER: A. Yes.
22	Q. And the courses the question that
23	was asked to you is what courses you've had as a
24	Ministry employee in terms of optimization of resource
25	management decisions; is that correct, and you were

listing off a series of different courses you had 1 Is that a fair summary of what's gone on there? 2 taken. Yes, that's right. 3 Now, the study that's -- or the 4 courses referred to here is a native studies course at 5 6 York University taught by Andrew Ricard; is that 7 correct? 8 Α. I didn't use the word major, but I 9 did indicate that it was a course at York, yes. 10 It's a native studies course? 0. That's correct, yes. It was dealing 11 12 with a number of issues related to the native people, 13 that's correct, resource management effects and 14 certainly optimizing resource benefits were one of the 15 subject areas. 16 0. Were formal optimization techniques 17 for resource management decisions presented to you? 18 No, not in terms of, say, a 19 university course on economics. We didn't get into 20 things like certainly cost/benefit analysis or 21 willingness to pay or those sorts of things. It 22 certainly was not an economics course. 23 Q. Do you know what training Mr. Ricard 24 has in this field?

A. I would have to go back and check

1 the -- no, I don't. 2 You also mentioned there on lines 2 3 to 6 courses you took in constructive citizen 4 participation and interpersonal communication; is that 5 correct? 6 Α. That's correct. 7 Did these courses cover formal 8 optimization techniques for resource management 9 decisions? 10 That was by Des Connors and, again, Α. 11 you know, it has been quite some time, but if your 12 question is: How did -- did it deal with making 13 tradeoff decisions, with dealing with publics, with rationalizing decisions, constructive citizen input, 14 15 that sort of thing, I would say yes. Probably the environmental impact 16 assessment course that I took at the Banff Centre, that 17 18 was a week-long course, probably was the one that dealt the most with optimizing resources and avoiding 19 20 conflicts and it went back to a lot of certain of the 21 university-type training. 22 Does Mr. Connors have training in 2.3 formal optimization techniques for resource management 24 decisions? 25 I'm sorry?

1	Q. Does Mr. Connors have training in
2	formal optimization techniques for resource management
3	decisions?
4	A. I don't know.
5	Q. They were presented to you at that
6	course, though; were they?
7	THE CHAIRMAN: He indicated what was
8	presented at that course; did he not?
9	MR. HANNA: I didn't hear an answer yes
10	or no whether those were he's indicated various
11	things, but I didn't hear: No, they were not
12	presented; or, yes, they were presented.
13	MR. PYZER: You see, I have difficulty
14	with the terms. If what you're asking me: Did Des
1.5	Connors present an economic workshop, the answer
16	certainly is no.
17	What he presented he's a specialist in
L8	dealing with exactly as the course was called,
19	constructive citizen participation, how in fact you get
20	input into planning decisions, the various mechanisms
21	involved in doing that and how you in a number of
22	forums, in a number of ways you can come to what I call
23	optimizing resource decisions by having those people as
24	part of workshops, as study groups, as cooperative
25	management programs, task forces, those sorts of

1	things.
2	MR. HANNA: Q. So what you're suggesting
3	to me that your concept of optimization is public
4	consultation, but that's not formal optimization
5	techniques as it's commonly used in the - how should I
6	say - the resource management literature?
7	MR. PYZER: A. Well, actually, speaking
8	with our economists, people like Nilam Bedi and
9	Allison Ms. Coke that was on the panel, you will
10	find very few resource agencies that do true things
11	like cost/benefit analysis just because the body of
12	literature warns you against doing them for
13	environmental processes.
14	In fact, what they're designed to be used
15	for basically are projects and, in fact, the body of
16	literature warns against using those sorts of things to
17	make these kinds of decisions that we're talking about.
18	Q. You mentioned later on page 10161,
19	lines 9 to 11, courses you have taken in resource
20	evaluation. Do you see that?
21	A. Could you draw me to a line, please?
22	Q. Lines 9 to 11.
23	A. Yes.
24	Q. Who are the instructors at the Huff
25	Stansbury course?

1	A. It was Jim Stansbury himself.
2	Q. Do you know what training he has in
3	formal optimization techniques?
4	A. You worked for him, you would know
5	better than I. I really don't.
6	Q. Did he present to you any formal
7	optimization techniques?
8	A. Again, it was prior it was the
9	reason we hired Mr. Stansbury at that time was in fact
LO	a precursor to the environmental assessment and what in
11	fact we did was involve the timber management companies
12	in the northwest region and basically all Ministry
13	staff with the
L 4	THE CHAIRMAN: Mr. Hanna, the Board has
15	had enough of this line of questioning. Let's get on
16	with the questions about what this panel testified
17	about.
18	Mr. Pyzer was put forward as a resource
19	management witness with training in resource management
20	and those kinds of decisions. Now, if your end result
21	of this line of questioning is, is that he has not had
22	the formal training that you seem to be indicating in
23	your line of questioning of resource optimization, then
24	perhaps you can short circuit this, Mr. Pyzer, by

either indicating you have had a formal training in

1 that area specifically or you have not. 2 MR. PYZER: I have a Master's Degree in 3 resource management and 20 years' experience with the 4 Ministry of Natural Resources geared to exactly that 5 sort of thing. Now --6 THE CHAIRMAN: But you didn't take a 7 course specifically--8 MR. PYZER: Called... 9 THE CHAIRMAN: -- called optimization? 10 MR. PYZER: That's right. 11 THE CHAIRMAN: You didn't get a degree, 12 if one is granted, in a course called optimization. 13 Presumably you don't know from your answers so far 14 whether your instructors in various courses that you 15 have taken have degrees or other certification in 16 optimization; is that the case? 17 MR. PYZER: Other than my university 18 professors, that's correct. 19 THE CHAIRMAN: Okay. I don't think you 20 are getting very far, Mr. Hanna, going much beyond 21 this. So let's get on with some questions that are 22 more or less relevant to the testimony given by this 23 panel. MR. HANNA: Yes, Mr. Chairman. 24 could have the indulgence of the Board for three more 25

questions, and what they --1 THE CHAIRMAN: No, I think we are going 2 to go on at this point. 3 MR. HANNA: Mr. Chairman, I would submit 5 to the Board that what we are facing here with this particular witness' evidence is socio-economic impacts 6 and associated with that is the whole guestion of 7 8 making tradeoffs and reaching optimum decisions. 9 THE CHAIRMAN: And he has indicated 10 through his experience, which totals some 20 years in 11 the field, that he has been in the habit of making such 12 types of tradeoff decisions. Is that correct, Mr. 13 Pyzer? 14 I believe it's 17 to -- 17 MR. PYZER: 15 and some months. 16 THE CHAIRMAN: Well, as you are probably 17 aware, Mr. Hanna, not everything is geared solely to 18 professional certification or a university degree. 19 Experience in an area counts for something and, in 20 fact, there are many instances where the Board will in 21 fact accept expert opinion from somebody without any 22 formal education or formal certification but experience in the area. 23 24 I can allude to such people as farmers, 25 hunters, fishermean, et cetera, in those types of areas

1	for which they have experience.
2	So I don't think it is particularly
3	productive to go on with a line of questioning
4	concerning Mr. Pyzer's qualifications in the area of
5	making tradeoff type decisions. I think that has been
6	established, at least to the satisfaction of the Board.
7	MR. HANNA: Thank you, Mr. Chairman.
8	Q. Mr. Pyzer, can we turn to Exhibit 16
9	which is the Baskerville Report, please, and
10	particularly page 72.
11	MR. PYZER: A. I am sorry, which report?
12	Baskerville?
13	Q. The Baskerville Report.
14	MS. BLASTORAH: Again, Mr. Chairman, I
15	would only indicate that I know it's unfortunuate Mr.
16	Hanna wasn't able to advise us. I believe I only have
17	one copy of that document so, again, I am without my
18	own copy of that.
19	MR. HANNA: Q. Mr. Pyzer, I would like
20	to get your opinion on two sentences in this report and
21	then we will be finished this subject.
22	Can you look at the last sentence or
23	the last paragraph on that page and could you read the
24	first sentence, please?
25	MR. PYZER: A. Read the last sentence on

1	page 16?
2	Q. It's the last paragraph the first
3	sentence in the last paragraph.
4	MS. BLASTORAH: I believe that's on page
5	72, Mr. Pyzer, of Exhibit 16.
6	MR. PYZER: I'm sorry, I'm confused.
7	MR. HANNA: Q. Exhibit 16.
8	MR. PYZER: A. Yes.
9	Q. Page 72.
10	A. Oh, I'm sorry. I was on page 16.
11	Yes. And you want me to read the last sentence?
12	Q. In the first paragraph no, the
13	first sentence in the last paragraph.
14	A. "Used in the Ontario Ministry of
15	Natural Resources sense, optimum and
16	optimization are at best jargon and
17	bear no relationship to the substantial
18	technical subject of optimization."
19	Q. Do you agree or disagree with this
20	statement?
21	A. I haven't given it any thought to be
22	honest, but
23	MS. BLASTORAH: Mr. Chairman, I would
24	only ask that the sentence be put in context. I think
25	the witness hasn't had an opportunity to review this

1	and I would ask that there is context obviously to
2	that statement in the paragraph above and I can only
3	point out that the witness
4	THE CHAIRMAN: Well, why don't we do it
5	this way: Mr. Pyzer, why don't you take the
6	opportunity at the next break of reading where this
7	starts on page 71
8	MR. PYZER: Yes, I will do that.
9	THE CHAIRMAN:Integration for Optimum
10	Benefits, read through perhaps to page 74, that
11	section.
12	MR. PYZER: Yes.
13	THE CHAIRMAN: And then perhaps you will
14	be in a better position to answer the question.
15	MR. HANNA: Thank you, Mr. Chairman.
16	Perhaps I may just also bring to his
17	attention one other question I was going to ask him on
18	that page.
19	Q. If you look, Mr. Pyzer, this is one
20	where one place else to focus your attention, is the
21	last sentence in the second paragraph, that large
22	paragraph on page 72.
23	A. Starting with "However"?
24	Q. Yes. If you could look at those two
25	and perhaps comment on those.

1	In terms of your evidence on
2	socio-economic impact assessment, would you say that
3	you're current in your knowledge of the latest
4	techniques and advances in socio-economic impact
5	assessment, particularly dealing with road systems?
6	A. I'm sorry, would you repeat that
7	question?
8	Q. Would you say that you are current in
9	your knowledge in terms of the latest techniques and
10	advances in socio-economic impact assessment,
11	particularly dealing with forest access roads?
12	A. What I would say is, is that I'm
13	current in how the Ministry of Natural Resources does
14	its planning relative to access roads and how the
15	Ministry deals with other users and deals with the
16	socio-economic environment.
17	Now, whether that's current with the way
18	other jurisdictions do it or with other people, what
19	I'm most familiar with and what I do is the way we have
20	outlined in our evidence package and in the Class
21	Environmental Assessment Document.
22	Q. Are you current with what is being
23	done by other jurisdictions; simply yes or no?
24	A. Well, you know, I read I
25	certainly read some of the material, but there is

1 volumes and volumes out there. I certainly don't read 2 it all. THE CHAIRMAN: Mr. Hanna, current is a 3 4 relative term. You could be current with another 5 jurisdiction and somebody else looking at what you know 6 could say you are totally out to lunch. 7 It is the type of thing that changes from 8 jurisdiction to jurisdiction, and I would submit to you 9 that there is no precise level of knowledge at any 10 given point in time in many disciplines. 11 MR. HANNA: Q. Mr. Pyzer, do you closely 12 follow the socio-economic impact assessment literature? 13 MR. PYZER: A. You know, the American 14 Federation -- or the American Fisheries Society, for 15 example, and there is a number of reports in there, our 16 own economists in terms of Fisheries Branch, Nilam 17 Bedi -- Tony Usher had a report in there. 18 Those sorts of things, when it's an AFS 19 symposium on socio-economic tools relative to the way 20 we do business, certainly those things are circulated 21 very widely. 22 Nilam Bedi is another example, one of our 23 economists, put on a socio-economic training program a 24 couple of months ago for 70, 80 people and which

specifically related to fisheries and fish management.

So when you participate in those kinds of forums for 1 2. three days at the Geneva Conference one would be 3 exposed to a lot of them. So from that perspective, you know, that 4 is the way that the Ministry does business and that is 5 the way that the Ministry trains its staff. 6 7 Now, I don't know whether our specialist 8 in main office or our specialists in main office, when 9 they come to do our training programs, obviously, and we go on those courses, how current they are. I assume 10 11 they are very current and they are giving us the best 12 of the literature and the best of their advice. 13 O. You made reference to the 14 transactions of the American Fisheries Society. I take 15 it you are of the view that this was somewhat of an 16 import -- it was called the Social Assessment of 17 Fisheries Resources Conference. That was a relatively 18 important... 19 It was relatively, it was of Α. 20 interest, yes. 21 And it pertained to some of the Q. 22 evidence that you have brought forward before this 23 Board?

about this later. You are aware of the fact that we

Minor -- again, we will probably talk

Α.

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1	did the social economic analysis of fisheries on Lake
2	of the Woods, cost us several hundreds of thousands of
3	dollars, but now I wouldn't consider that
4	state-of-the-art, in fact there is a lot of people
5	within the Ministry that think that's a very cursory
6	examination and are not particularly thrilled with it
7	one way or the other.
8	You know, it's some pretty good work, but
9	even though we have done it and we hired the
10	consultant - and, again, I believe you are one of the
11	people that we hired to do that job. Now, is that
12	current? I don't know.
13	Q. I am asking your knowledge in terms
14	of how extensive it is in terms of socio-economic
15	impact assessment. Are you familiar with Exhibit 586
16	which is one of the papers presented at that conference
17	you referred to, to somewhat of a landmark conference
18	in terms of socio-economic impact assessment of
19	fisheries resources?
20	THE CHAIRMAN: Who refers to it as a
21	landmark conference? Why is that particular conference
22	known as a landmark conference?
23	MR. PYZER: I don't believe I referred to
24	it as a landmark conference.
25	MS. BLASTORAH: Mr. Chairman, I really

apologize to Mr. Hanna for the constant interruptions. 1 I do recognize it's not his fault, but this is an 2 exhibit from an earlier panel and, to my knowledge, Mr. 3 Pyzer has not had an opportunity to read it. 4 Obviously it's about -- I believe, 5 6 probably an 11-page article anyways. So, again, I 7 would only caution him that he may need time to review 8 it. 9 I will let Mr. Hanna ask his questions and see if that's the case. 10 11 MR. HANNA: I don't intend to ask -- go 12 into the details of the paper, Mr. Chairman. I believe 13 the witness actually already referred to it in terms of 14 this being one of the papers in the conference that he 15 had referred to. 16 MR. PYZER: The point I was making is 17 that simply every district in the Ministry of Natural 18 Resources I believe gets the transaction listings and 19 you asked if I'm -- how aware T am of current knowledge 20 and understanding. 21 Certainly when that conference 22 proceedings would come through, and as I mentioned Tony 23 Usher's work on Lake of the Woods in our district, 24 which we had hired that firm to prepare that report, 25 obviously we read it with some interest. In fact, we

1 reviewed the paper for him before it went into the 2 transactions on that socio-economic study. 3 Nilam Bedi from our Ministry of Natural 4 Resources was also an author in that same conference. 5 in fact was a major contributor. He is our fisheries 6 economist. 7 In terms of a lot of that cost/benefit 8 analysis, our direction we take from the very people 9 that were participating in this conference on behalf of 10 the Ministry of Natural Resources. 11 So I guess what I am trying to say is that that is where our direction comes from. 12 13 MR. HANNA: Q. Is this technique that is 14 described in that exhibit, a quantitative technique 15 that could be used to estimate the socio-... 16 THE CHAIRMAN: Well, has he read the 17 exhibit? Have you read the exhibit? 18 MR. PYZER: No, no, I haven't. 19 THE CHAIRMAN: He can't really describe 20 what's in it if he hasn't read it. 21 MR. HANNA: Q. So you haven't had time 22 to read this particular article; is that --23 MR. PYZER: A. That was not one of the 24 ones that I read in that transactions, no. 25 Q. Now, is the reason you didn't read it

because you didn't have time or you didn't feel it was 1 2 relevant to your job as a resource manager? 3 Α. How long ago were those proceedings? 0. 1987. 4 5 So you are asking me why I didn't Α. 6 read an article two and a half years ago. I don't 7 know. I may have even read it actually and forgotten about it, but I don't believe I did. 8 9 Q. I see from your resume that you are a member of the Soil Conservation Society of America; is 10 11 that correct? 12 I was, I am not presently. 13 Do you still read the Journal of Soil 0. 14 and Water Conservation? 15 Again, a lot of those organizations, 16 the reason I am no longer personally a member, the same 17 as with the Ontario Federation is our district offices 18 and -- in many cases the district is the member, if you 19 will, so we get all of the journals and reports coming 20 in. I don't read it constantly, no, but I have seen 21 copies of it. 22 Again, as you are aware, the Ministry of 23 Natural Resources -- most of our conservation 24 authorities people - and I was in Conservation 25 Authorities Branch - were the key members on the Soil

1 Conservation Society and I believe in fact we held many 2 of the symposiums in North America. 3 There was a recent article published 0. 4 in the Journal of Soil and Water Conservation entitled: 5 A Bioeconomic Approach to Estimating the Economic Effects of Watershed Disturbance on Recreational 6 7 Commercial Fisheries by John Loomis. Are you aware of 8 that? 9 A. No. So you have no idea of whether it 10 0. 11 pertains to your evidence or not? 12 That's correct. Α. 13 0. Would you agree with me that the 14 proposed Timber Management Class Environmental 15 Assessment nowhere proposes the use of formal 16 optimization techniques in order to analyse 17 socio-economic impacts? 18 Generally I think that is a fair Α. 19 statement, that's correct. Generally, yes. For good reason, I might add. 20 21 O. Well, that is my next question. Is 22 it that the Ministry has rejected these types of 23 techniques, or is it simply they haven't applied them 24 broadly on an operational level? 25 Α. No. Again, I think our specialists - and I did talk to them certainly prior to this panel 
people like Ms. Coke who has been a witness on previous

panels and certainly people like Nilan Bedi.

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I am advised that -- in fact am aware that relative to the American Fisheries Society,
Ontario is one of the few jurisdictions in North
America that even has economists on staff.

And, as you know, within terms of the American Fisheries Society, which has membership of several thousands and thousands of people, that symposium which we were just talking about was one of the first times ever that it even been attempted and, in fact, drew very, very few people and some MNR people being very prominant in it just because it is such an emerging science and certainly talking to our specialists in main office, the body of literature certainly is that, things like cost/benefit analysis, because they are mathematical models and relative to the kinds of subjects that the ministry of Natural Resources deals with. The body of literature at this point in time says that the risk is extreme to try and implement them at this point in time because the potential to make a wrong decision is significant.

And I guess what I am saying is that in terms of the key socio-economic people within our

1 Ministry, a conscious decision has been made at this 2 time that we in fact don't want to get into do that, not until it's refined and those risks are reduced. 3 4 And that what is being proposed in this document, and 5 the way we do make decisions in terms of resource 6 management planning is much preferable to using a 7 mathematical model at this point in time. 8 Q. Now, from what I have heard, you are 9 relying highly there on other peoples' expertise and 10 not yours? 11 Absolutely. They are the experts in Α. that field. 12 13 Q. And so the knowledge insofar as other 14 jurisdictions is not yours but theirs? 15 That's correct. That is a Ministry 16 position. 17 Q. Excuse me, what is a Ministry 18 position? 19 The one that I just enunciated, Α. that -- the Ministry's position -- it's not one person. 20 21 It is that key person that makes that policy decision 22 and that group that I was speaking of. 23 So I would say it's not -- I'm just trying to clarify that it wouldn't be one person that 24 25 is saying that is the reason why we have chosen a path

or isn't, that would be the Ministry's position. 1 Is there documentation on that formal 2 policy and how that decision was reached? 3 No, other than this is the process 4 Α. 5 that we have put forward as an alternative. 6 So there was a policy decision made? 7 You don't usually have policies Α. saying why you don't do things. 8 9 Q. You don't have policies saying why 10 you do do things, and why you might reject something that was available? 11 12 A. No, this is our policy statement in 13 terms of how we would do timber management planning and 14 make those kinds of socio-economic tradeoffs and 15 decisions. You wouldn't pass -- write a policy to talk about the two thousand reasons why you wouldn't. 16 17 Can we turn to Document No. 5 which Q. 18 is the supporting documents to your witness statement. 19 It starts on page 340 of your witness statement. 20 Now, I discussed with Mr. Clark in Panel 21 11 tables that look very similar to these and rather 22 than go through the whole methodology with you --23 MR. CASSIDY: I am sorry. You are 24 talking about document number ...? 25 MR. HANNA: I'm talking about Document

1	No
2	MR. CASSIDY: I am sorry, you referred to
3	some tables and you referred to page 341, Mr. Chairman,
4	which is not a table, it has
5	MR. HANNA: I apologize, Mr. Cassidy.
6	The tables begin on page 350 I believe and basically
7	make up much of the remainder of the document.
8	MR. CASSIDY: Thank you.
9	MR. HANNA: Q. Is that correct, there
10	are a series of tables there very similar to what was
11	presented in Panels 10 and 11?
12	MR. PYZER: A. That's correct. Again,
13	we explained at the beginning that we did try and do
14	that for consistency all the way through. They are
15	also the very same as what was presented in Panel 7.
16	Q. So the methodology used here is
17	basically the same as what's been used in 7, 10 and 11?
18	A. In terms of portraying the
19	information, that's correct.
20	Q. Now, there was some difference
21	between how the information is presented here and in
22	Panel 10, and I wanted to understand the rationale for
23	making those changes. On page 347
24	A. Yes.
25	Qthere's a series of stakeholders

1	listed there.
2	A. Mm-hmm.
3	Q. Now, you would agree with me that the
4	list that is shown there does not correspond with the
5	list that is in the tables that are attached to the
6	remainder of this, that they are actually broken up
7	into different groups and also that the order is not
8	the same as the orders that is here, which may be a
9	minor point, but they are quite different?
10	A. I am not sure that they are
11	different. Maybe you would have to direct me to the
12	difference and I can explain the reason for that.
13	Q. Certainly.
14	MS. BLASTORAH: Mr. Chairman, just a
15	question of clarification. Is it within the witness
16	statement that we are talking about where the
17	differences are or between the stakeholders that were
18	discussed in this panel and previous panels?
19	MR. HANNA: I am right now looking at the
20	list of stakeholders on page 347 and comparing that to
21	the tables that start on page 350. I will, however, be
22	comparing this list to what is in Panel 10's evidence.
23	MS. BLASTORAH: Okay. I only rose
24	because we did give evidence-in-chief at page 19994 of

the transcript to the effect that the same stakeholder

groups were used in this panel as had been used in 1 2 previous panels, and that is at line 22 and following. 3 Mr. Pyzer indicated: 4 "And I simply listed there in terms of 5 commercial stakeholders, recreational 6 stakeholders and so on, the very same 7 groups that you have seen in many, many 8 previous panels." 9 MR. HANNA: Q. Well, maybe I overlooked 10 something in your witness statement, Mr. Pyzer. But as 11 best I can tell the general public is not dealt with at 12 all in your tables? 13 MR. PYZER: A. To the extent that they 14 are not part of any one of those other groups? 15 O. No, in the previous evidence we 16 brought forward, the general public has been dealt with 17 as a separate group having its own set of concerns that might be, if you will, non-use concerns, much broader 18 19 concerns than using the resource, per se. 20 A. Yes, that was also part of my package 21 in 7. That must have been an oversight in fact, but 22 you are correct, that's right. 23 Q. Now, in Panel 10, consumptive and 24 non-consumptive user groups were separated; in this 25 evidence they are lumped together.

You have got Part 6 - and I am not too 1 2 sure where it starts - starts on page 385, deals with 3 Crown land recreationists/naturalists and I believe that includes both consumptive and non-consumptive 4 5 users of the forest land; is that correct? That's correct. It includes those 6 groups on 347 that I have indicated naturalists, 7 8 anglers, hunters, canoeists, hikers, Crown land recreationists, that's correct. That is consistent 9 with Panel 7 as well. 10 11 Q. Now, would you not agree that the socio-economic impacts of road access might be 12 13 significantly different in some cases for consumptive 14 and non-consumptive user groups? 15 Α. Yes. 16 0. But you lumped them together? 17 Α. Pardon me? 18 But you have lumped them together? Q. 19 I have lumped them together in terms 20 of the broad heading Crown land recreationists, but if 21 you look under the various categories: user conflicts, 22 construction use, et cetera, et cetera, et cetera, 23 all the way through, you will see that there are 24 differences, that in fact one group's meat is another 25 group's poison.

1 THE REPORTER: I'm sorry, Mr. Pyzer, 2 you're losing me. 3 THE CHAIRMAN: A bit slower. 4 MR. PYZER: I'm sorry. 5 The point I was trying to make is that if 6 you look on the left-hand column under the various 7 headings that is really the key as to what are the 8 potential socio-economic environmental effects. 9 And the point there is that they have 10 been segregated out, but in fact one group's - as I 11 said previously - one group's meat would be another 12 group's poison. 13 And in fact we have done that -- I have 14 done that consistently I believe all the way through. 15 And often times you will find that they are 16 diametrically opposed. But the key certainly is: What are the potential effects and then, of course, on the 17 18 right-hand side: What are the corresponding measures 19 to enhance, predict, prevent, minimize, mitigate or correct those effects. 20 21 MR. HANNA: Q. If one were to develop a 22 predictive technique to analyse the socio-economic 23 impacts of forest access on different user groups, 24 would you expect to lump all Crown land recreationists as one group, or would you be expected to undertake a 25

separate analysis? 1 MR. PYZER: A. No. I would expect that 2 you could lump them altogether if you were doing it the 3 4 way we were proposing. Q. No, my question was: If you were to 5 develop a predictive technique--6 7 Α. Yes. --to analyze the impacts---8 0. 9 Well, of course, if you were 10 developing predictive techniques you would try and 11 narrow that down to the most specific group or 12 individual possible, but that is certainly not what 13 this was designed to be. 14 Now, am I correct in saying that 15 there is not a generic approach to predicting and 16 evaluating socio-economic impacts in the area of the 17 undertaking with respect to access in this document? 18 Α. A generic technique? 19 Yes, mm-hmm. Q. 20 No. The generic technique would be 21 the process itself; it would be the data collection, it 22 would be the analysis of the data, it would be the 23 reliance on other management plans - be they Fish 24 Management Plans, Wildlife Management Plans - it would

be government direction in terms of program policy,

1	targets, objectives, it would be the expression of
2	those at the district land use at the district stage
3	and then it would be the entire public consultation
4	exercise wherein within which all of those various
5	user groups come together and bring forth those
6	additional pieces of information which are required.
7	Q. Can we look at page 347, please?
8	A. Yes, I am there.
9	Q. The last paragraph there.
10	A. Yes.
11	Q. Second sentence.
12	A. Mm-hmm.
13	Q. "In some cases these values can be
14	expressed quantitatively in economic
15	terms or by other measures."
16	Have you done this anywhere in your
17	analysis, expressed these values in quantitative terms?
18	A. Not this analysis. Again, that was
19	not the intent of this. The intent of this is to
20	demonstrate when you are building a road the potential
21	effects on the socio-economic environment and maybe,
22	with all due respect, maybe your problem is, is that
23	you are looking at socio-economic environment in too
24	narrow a term.
25	We have looked at socio-economic

cr ex (Hanna)

environment here in the Environmental Assessment term 1 of the word that is -- I mean, as far as I look at it 2 much, much larger. 3 What we are saying here is that when you 4 5 build an access road it has many potential effects, both good and positive -- both positive and negative on 6 7 that broad environment and that can be everything from 8 an Indian trapper to an Indian community, or a person 9 who wants to photograph wildlife. 10 And so what we have done here in this 11 package is try and identify what those potential 12 effects could be and if in fact they were identified in 13 the timber management planning exercise, what methods 14 the Ministry would use to mitigate or to correct them 15 or to remedy them. 16 Q. But it doesn't say how you would 17 predict them? 18 A. No, it doesn't. They can be 19 predicted in many, many ways. 20 Q. Now, you indicate there in the second 21 clause that other measures can be used to express 22 resource values. And I believe one of the examples is 23 cubic metres of wood? 24 I am sorry, what line are you on? A.

Q.

I am on the fourth and fifth line of

1 that last paragraph, starts with: 2 "...or by other measures..." 3 Α. Yes. 4 0. Page 8. And you indicate there cubic 5 metres of wood is another measure. 6 Α. Yes. 7 Can you explain to me why you would 0. suggest using cubic metres of wood rather than the net 8 9 economic value of the wood in order to measure its socio-economic importance? 10 A. 11 Again, it's just an e.g. We could 12 have probably put down reams and reams of e.gs. 13 The point I am trying to make here is if 14 you want to look at it in terms of the economic sense 15 in terms of straight dollars and cents, certainly there 16 are some things here that we can measure in those 17 terms. 18 We do that with the tourist industry, we 19 certainly go in - and that is one of the key roles that 20 the Ministry of Tourism and Recreation provides in 21 terms of financial statements - we know what 22 replacement costs are, we know how much monies, fairly 23 easy to quantify. 24 But if you take that same industry and 25 start talking about cost/benefit analysis, and this is

the real problem with it, and why generally - and in 1 2 all honesty, I have never had a group come forward and want to do it - is the dilemma is that while one person 3 can put a billion dollar figure on it - whether that's 4 the forest industry or the mining industry or 5 whatever - you inevitably come up with talking about 6 tourist operators or naturalists or whatever and their 7 concern is with that view there, with all of those nice 8 9 white pine trees growing on the hill.

THE CHAIRMAN: Mr. Pyzer, a bit slower, please.

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MR. PYZER: I'm sorry. And that is the dilemma with the cost/benefit approach because while you even may get agreement that: Okay, we are going to give it a try, immediately after having gotten the agreement to give it a try, it breaks down when people then start saying: Well, I don't agree with the value that you have imputed or implied that my concern or my value is worth.

And our dilemma, when you are talking about a process like timber management planning, is that you can't put values on many, many of the things that a lot of people who would like to make it a very narrow and very simplistic and very rigid process would like us to do. You can't put a price tag on that view

of white pine trees in a wilderness setting or on the sunset; whereas the forester can put a value on the wood.

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And that's why we don't rely on it, and even if you could put those values, or rather you come to a bottom line decision, that invariably again breaks down because they come back and say: Well, you know --

MR. HANNA: Q. I am sorry, whose work?

The key point that I am MR. PYZER: Α. trying to make is - again, just coming back - is, the reason why I am hedging on this is that we did tourism quidelines for the protection of -- or we did Timber Management Guidelines for the Protection of Tourism and that was a committee of two industries, the tourist industry and the forest industry and all through that we got into these major arguments about, you know: If we were allowed to cut the wood on the TransCanada Highway - and we heard that probably 25 times - it was worth one point - and I forget how many billions of dollars - and then the tourist industry would come back and say: But to the travelling public or to the motoring public it's worth -- and then they would give a figure and then the forest industry would come and say: Well, where did you get that figure from. you will: I can't justify it, but that is what it's

worth to a guy to take a look at it when he travels along the TransCanada Highway.

And that is the dilemma with cost/benefit analysis, is that you are trying to compare apples and oranges with peaches and bananas and we have put a process together that tries to bring those people face-to-face and say: Listen, if we can't put economic values on it to compare, let's at least have a process that allows us to sit down and come to some conclusions so that we understand where you are coming from and where I am coming from and make some good resource management decisions.

It's not that we don't know that those other techniques are out there, it's just that they have not been tried in the context of processes like timber management planning. You can find them for a dam, and you can find them for specific projects, but you cannot find them for processes, other than in a very --

- Q. To the best of your knowledge?
- A. Well, that is what I am being
- advised, that's correct.

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Q. Mr. Pyzer, I don't remember my
referring to the term benefit/cost analysis in any of
my questions so far. Where did you -- are you

1 inferring that that is what I am suggesting? I am just 2 trying to figure out --3 A. No, I am just using that as an 4 example. 5 Q. Are there other ways to deal with 6 these sorts of - how do I say - to quantify these terms 7 and to deal with them in a systematic and predictive 8 way? 9 Well, there are all kinds of Α. 10 techniques. Gee, I taught an economics course at 11 community college. You're asking me to go back now to 12 my teaching days. But a willingness to pay, those sorts of things and, again, there are inherent problems 13 in that whole concept of willingness to pay, 14 particularly when you are talking about access to 15 things like fisheries, as an example. 16 17 Everyone knows that \$10 -- the fact that 18 you pay \$10 to get a fishing licence isn't the real 19 value to the average person in Ontario or to a person 20 fishing here. 21 But there are such political implications to saying that you are going to pay what the true value 22 23 is, whether that's a ZEC system like Quebec or a European system where you get true market decisions, 24

where if you want to go fish on a river in England it

- 1 costs you \$1,500 for the day.
- 2 Politically Ontario I believe has chosen
- a route that says we are not going to go that
- 4 direction.
- 5 Q. But is there not a difference between
- 6 realizing the value the public puts on the resource in
- 7 terms of monetary terms and using that value in
- 8 reaching optimum decisions; is there not a fundamental
- 9 difference there; one is a political issue and one's a
- 10 technical issue?
- 11 A. Sure there is and the problem with
- things like willingness to pay is that very problem, is
- that you ask people what are they prepared to pay and
- then you don't -- many people can't put a lot of
- confidence in the answers that they get back because
- that is exactly what it is, a hypothetical question and
- a hypothetical response.
- Q. I take it you have attempted to
- undertake these types of analyses?
- A. Again, you are familiar with the fact
- 21 that the socio-economic project that we carried out on
- Lake of the Woods did many of those sorts of things and
- tried to do them and, in fact, if you go back and read
- that report you will see that the authors -- probably
- one of the most common conclusions that they came to or

1 apologies, if you will, as they went through was the 2 difficulty of doing many of the things that we are 3 talking about. 4 And so -- and this is the real danger, is 5 that you start making assumptions because you don't 6 have the information or can't get it, and then you 7 assume, and then you make an assumption about the 8 assumption, and then by the time you do that 10 or 15 9 places through the exercise you don't have a great deal 10 of faith in the bottom line answer. 11 Q. Is there a way to avoid those 12 assumptions by doing it implicitly? 13 Well, again, even the work that you are familiar with having done for us, there wasn't - at 14 least in terms of the bottom line conclusion, it was 15 the state-of-the-art and --16 17 Q. No, but my question, Mr. Pyzer: Is not what we are really doing by maintaining these 18 relationships implicitly avoiding the real issues; in 19 20 other words, by not making them explicit and not laying them on the table we really don't know if this is our 21 22 best quess? 23 We do that all the time. That is Α. exactly what this process is designed to do and in my 24

mind that is the great strength of this exercise, is

that - and with all due regard, the strength of this exercise is that we sit down in rooms and we sit at meeting halls and we honestly want to come to win/win solutions and I will take that any day over an accountant's bottom line decision.

We sit there and we don't -- in all honestly don't deal with big winners and big losers and big companies and small tourist operators, we deal with specific concerns and those are outlined in this document and if that's a \$5,000 outpost camp that is going to be accessed by a road, we don't say: Well, that road is going to provide a million dollars worth of timber and your oupost camp is only worth \$5,000 so the decision is made where that road is going through. We try and make that a win/win decision.

And that is the great strength of this exercise, and the greater strength is that the first time through, if it's a company unit, is that we don't even do that, the company does it with the tourist operator and we stand back as the honest broker and the monitor and the person watching over it.

And the even greater strength, as I see it, is that if we are all in for the long term, the company, is that they know they have to go back to that tourist operator five years now or those anglers or

1 those hunters or whoever they are dealing with, and 2 they know that they can't blind side you this time 3 through because they've got to come back and stand 4 before you and be accountable both to you as an 5 individual and to your association and to your 6 organization. 7 And I believe that is what scares the 8 hell out of the companies right now, and that is the 9 great strength in this exercise. 10 Q. Well, perhaps we will have to wait 11 for other views on that--12 Absolutely. Α. 13 --Mr. Pyzer. Mr. Ward, now Mr. Hogg Q. 14 in his evidence stated on several occasions - I believe 15 it's written in his evidence - that the Ministry's strategy for managing moose is not to use restrictive 16 17 access, but instead to use more a beneficial means to manage the wildlife population. I think he mentioned 18 the tags and whatever. You recall that? 19 MR. WARD: A. I do. 20 Q. Is this the case with fisheries 21 22 management, to use access as a management tool -- as 23 one of your primary management tools or not? A. We can use it as a management tool, 24 25 yes. I wouldn't say it's our primary.

1	Q. So you've come to a different
2	conclusion than the wildlife people in terms of how to
3	get the most beneficial result from the fisheries
4	resource?
5	A. Well, we are talking two different
6	things here in terms of: You're talking a moose
7	population, which in terms of numbers is certainly a
8	lot smaller than the numbers of fish I've got out there
9	to manage, so I couldn't do tag systems for fish or it
10	would be very difficult administratively, and certain
11	fisheries who may have tags, that would be on a smalle
12	localized situation.
13	Q. Are there not a great number of
14	creative means whereby fish populations can be managed
15	other than through restricted access?
16	A. Yes, it's possible.
17	Q. Is it your view that the maximum
18	benefit from the fishery is realized when the optimum
19	sustainable yield from the fishery is harvested?
20	A. Yes, depending on how you define
21	optimum because a lot of people have different
22	definitions of that.
23	MR. PYZER: A. Just to give an example,
24	Mr. Hanna. You know, in the Kenora District Fish
25	Management Plan we made a very conscious decision not

1 to manage at sustained yield, but in fact to manage 2 at -- for high quality fisheries and it certainly is 3 not our intention in many zones to harvest the sustainable harvest. 4 5 Q. No, and that's why the -- that's in 6 fact why the term optimum sustainable yield was coined; 7 is that not right? 8 MR. WARD: A. That's right. So you can 9 get some of those kinds of value judgments into 10 managing your fishery right. 11 Q. Okay. 12 And I think Peter Larkin wrote about Α. that about 10 years ago, saying good-bye to maximum 13 14 sustained yield. 15 Is it not the case that the benefits Q. 16 drop off when the optimum sustainable yield is 17 exceeded? 18 Yes, that's true. 19 And the converse is also true if you 0. 20 don't reach the optimum sustainable yield? A. That's true, that's the theory behind 21 22 it. 23 And this is a central theme behind 0. 24 SPOF, and perhaps you can tell me what SPOF stands for, SPOF and SPOF 2 which is currently being initiated by 25

Α. That's correct, yeah. 2 So perhaps for the Board's --3 0. Well, that's our strategic plan for 4 Ontario's fisheries. The first plan was developed in 5 1976 and it's just presently being revised and going 6 7 through a public consultation phase right now. And I believe there is a big workshop 8 9 coming up with our major stakeholders at the end of 10 this month, I believe. 11 I would like to deal with a specific 12 example here, if I could, for a minute. You're 13 familiar with Trout Lake? 14 The one east of Red Lake? Α. 15 Red Falls -- Ear Falls, yes. Q. 16 Yes. Α. 17 Approximately how large a lake is 0. 18 this, just in general terms? 19 I don't know, several square miles. 20 I'm not too sure about the size of it. 21 Quite a large lake? Q. 22 Quite a large lake, yes. Α. 23 It is within your region, though; is 0. 24 it not?

your Ministry; is that not correct?

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That's right.

A.

1	Q. So it's within your responsibility?
2	A. Yes.
3	Q. Would you have any idea of what the
4	approximate optimum sustainable yield of Trout Lake is?
5	A. No, I wouldn't.
6	Q. Would you have any idea of whether
7	it's being exceeded or not met with current fishing
8	pressure?
9	A. I understand right now the Red Lake
10	District is doing a creel survey on Trout Lake and I
11	don't think they would be they wouldn't be able to
12	provide you with the answer to that until this creel is
1.3	finished this year.
L 4	Q. Now, on Trout Lake there are four
15	main lodges; is that correct?
L6	A. I believe that's about the number,
17	yes.
18	Q. And I believe Trout Lake is currently
19	under some pressure in terms of road access; is it not?
20	A. I think that's one of the issues,
21	yes.
22	Q. And the tourist industry has a
23	concern about this expansion; is that correct?
24	A. Correct.
25	O. Now, accepting the proposition for

the time being that the current optimal sustainable 1 yield is not being met because of the lack of access, 2 the Ministry is faced with a very difficult tradeoff 3 4 there: is it not? Yes. 5 Α. And you would agree with me that in 6 7 laying out an access road network one is faced with 8 trading off very significant values, both timber and 9 non-timber, and the benefits can be realized by 10 different Crown land users quite differently? 11 Yes. 12 Would you agree with me that it is Q. 13 not an easy problem in any respect? 14 I agree with that. A. 15 MR. PYZER: A. Mr. Hanna, if I could 16 interrupt though, just to clarify one thing that may 17 help you, is that that -- none of what you've just said 18 has any relevance to a timber management plan. 19 And what you're really talking about -20 and I even hate to suggest it, that we would ever be 21 doing a Class Environmental Assessment on the way the 22 Ministry does fisheries management plans - but those decisions are made in a fish management plan, and the 23 24 implication for timber is that the timber management

plan would simply follow the direction that's laid out

in the fish management plan.

And I guess I would even go so far as to say the points that you may make - and I don't know what they are going to be - but that they may be relevant. If they are relevant they're relative to the fish management planning process, not to timber management planning.

But I would suggest that those decisions are not made in the context of timber management planning and I think it would be a discredit to your clients if you even suggested that it would be a good place to make them, because timber management planning isn't the spot to make fish allocation decisions.

That's the whole reason we spent five years doing a fish management plan for every district in northwest Ontario, and we debated whether the trout lakes of the world were going to be road accessible or not road accessible, which lakes were going to be -- which lakes we were going to protect the tourist industry, and that was the subject of major, major public consultation.

In fact, in my district alone I believe we sent out six and a half thousand of these tabloids on the Kenora Fish Management Plan to every person who had a residence in Kenora District.

And I guess the only point I want to make, Mr. Chairman, is those issues have been debated and we now have a decision and that decision is reflected in terms of whether Trout Lake will or won't be accessed, but it's not — and the only point I want to clarify — and I do want to do this in a positive sense — is just simply to clarify that that's not something we deal with in terms of timber management; that is a given in terms of a public decision and a Ministry decision that how Trout Lake is going to be used or how Lake of the Woods, or how the Winnipeg River System, that's all been debated and a decision has been rendered in terms of a fish management plan.

Q. So for the purposes of this Board then, you are saying that for all waterbodies in the area of the undertaking a decision has already been determined in terms of whether or not they should be made road accessible to the public?

A. I'm saying in a vast majority of cases, certainly where there's a fish management plan - I can speak best for northwestern Ontario and Kenora District - but by and large absolutely.

I can look in any one of these zones in Kenora District and tell you where are the lakes that we do want to put the access roads to, and where we

1 don't, and what the rationale is for that decision, and 2 where the existing tourist operations are, and why we 3 intend to protect those. 4 That's why -- and I quess it relates back 5 to some of our socio-economic discussions, why you 6 wouldn't debate the social economics in the timber 7 management plan because those are decisions which we're 8 implementing via the timber management plan. 9 THE CHAIRMAN: Mr. Pyzer, just on that 10 line - and maybe this is the subject of the next 11 panel - but where there is a fish management plan in 12 existence and you come along at a later date and want 13 to talk about timber management planning, are the 14 decisions reached in the fish management plan, having 15 preceded a timber management plan, binding in the sense 16 that you cannot change those bottom line conclusions by 17 implementing a timber management plan that would change 18 them? 19 That's a very good point MR. PYZER: 20 because in fact where the fish management plan also got 21 its direction from was the District Land Use Guidelines. 22 23 So certainly if one wanted to, in the context of timber management planning, I suppose you 24

could reopen the debate and, in so doing, would amend

the fish management plan and the District Land Use

Guidelines. But that would be the process, would be

one more of amending because you wanted to focus in on

a discussion as opposed to suggesting that by doing

timber management planning you're doing fish management

planning.

In terms of being a resource manager, I would suggest that's irresponsible to do fish management planning in a timber management plan process.

MR. HANNA: Q. I just want to make sure I understand this, Mr. Pyzer. Are you saying that the fish management plan would take precedence or not?

MR. PYZER: A. Let me give you an example in Kenora District, and I believe it's fish management zone 10. There is a zone there where we have said manage for increased road access and, in fact, there are a number of waterbodies - it's the zone in any event to the west of - it's in that Malachi Lake area and there's a zone there which, for a number of reasons relative to current harvest pressures, there are lakes there - and, again, I stand to be corrected because I haven't got it right in front of me, the appropriate section - but you could access lakes and, in fact, we are going to manage so that when timber

access roads go in that zone to in fact locate roads
because it will help us achieve the fish management
plan objectives which have been discussed with all of
the fishermen and the commercial fishermen and the
tourist operators in the district over the past five
years in terms of where we can meet our fisheries
objectives.

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And that's the other critical thing that's really important here, is that - again, if I can use my district as an example - there is say 20,000 people in the district of which, I don't know, maybe half are fishermen. The question is: How much fish or how much water do 10,000 people require.

And those are the kinds of subjects that have been debated intensively within here, and there is a target associated with that in terms of two kilograms per angler day which was refined in terms of the district fisheries management plan in terms of things like optimizing resources and in terms of having quality trophy fisheries, and those decisions are now in this document.

And to the extent that we can achieve them and integrate the timber management planning with the fish management planning, that's exactly what we will do. And by and large this does give direction to

timber management planning because we have debated in a public forum whether the trout lakes of the world or the Dryberry Lakes of the world or the Clearwater Bays of the world are going to be road accessed or not road accessed.

And we have debated the lake trout policies and the muskie policies and whether we're over-harvesting walleye and northern pike, and where we are going to keep roads away and where we are going to provide them in order to meet the target for resident anglers in the province.

And now we are talking about a timber management plan that we can ride on its coat tails, if you will, relative to access roads to help us to achieve these targets.

But we're certainly not going to try in a matter of a year, as a side issue, manage fish in any district because we happen to be doing a timber management plan.

MR. MARTEL: How systematic are those plans across the province, fish management?

MR. PYZER: I do know that the -- there was a direction that all districts had to have a fisheries management plan and it was within the past year or so.

1 To be honest, I do not know what the 2 current status is province-wide. I do know that every 3 district in northwest Ontario, as an example, has an 4 approved fisheries management plan, but I do not know 5 the status of the --6 MR. MARTEL: But the purpose ultimately 7 is that they would work in conjunction with timber 8 management? 9 MR. PYZER: Exactly, to provide that direction and -- because these issues that we're 10 11 talking about in terms of angling and hunting are 12 certainly -- they are major and they are very 13 controversial and this is an example. 14 We talk about SPOF and SPOF 1 and 15 strategic planning and district planning. Well, this 16 is the timber management plan, if you will, for 17 fisheries in any district, and it's essential that they 18 link and I suppose, to the extent that this provides 19 the direction, one could argue I guess that fish maybe 20 got the upper hand by at least having their plan done 21 first and up on the table. MS. BLASTORAH: Mr. Chairman, I would 22 23 just point out - and Mr. Martel - that the earlier 24 evidence I recall was that fisheries management plans 25 were either prepared or currently under preparation for

- all districts in the area of the undertaking. I stand to be corrected, but that is my recollection.
- MR. MARTEL: Is there a target date for finalization of those then, that they all be in place, a certain time factor?
- MS. BLASTORAH: I certainly can't answer that, Mr. Martel. I don't know whether one of the panel members could or not.
- MR. WARD: I don't believe there is, Mr.

  Martel, but I think most of the districts will have a

  plan in the next year, they will all be finalized. As

  Mr. Pyzer has said, the northwest region has their

  plans all approved.
- MR. MARTEL: Thank you.
- 15 THE CHAIRMAN: Just to understand this a 16 little bit further, Mr. Pyzer. If you had a timber 17 management plan with an approved fish management plan 18 already in place, would it be open for debate in a 19 timber management plan as to whether or not there 20 should be road access to various lakes when the fish 21 management plan preceding it already determined that 22 there should?
- MR. PYZER: I believe -- I have not seen that as happened, but I'm certain that that is -- for certain, because the fisheries management plan itself

1 can be amended at any time and any member of the public 2 could request that amendment. So I suppose in the context of the fact 3 4 that there is timber operations or a timber management plan being proposed, that certainly could be the thrust 5 6 to suggest: Well, let's take another look at this and possibly amend it. 7 8 THE CHAIRMAN: But that would be the 9 route? MR. PYZER: It would be an amending 10 11 process, that's correct. 12 THE CHAIRMAN: Of the earlier plan? 13 MR. PYZER: That's right. Although -- I 14 think I'm understanding what you're saying, in 15 following it through the timber management -- no, you are right, I agree. 16 17 That's right, you would amend this plan 18 and that would then give its new direction. Because we 19 are talking about the role of a lake and how those fish 20 are going to be managed, and we're really talking about 21 the allocation of fish as opposed to the allocation of 22 trees. 23 MR. MARTEL: How would you amend that 24 plan? 25 MR. PYZER: There is --

1	MR. MARTEL: Is there a formal process?
2	MR. PYZER: Yes, there is. And the
3	process is very, very in fact there's a fish
4	management planning manual that's very, very similar to
5	the timber management planning manual. And I would go
6	so far as to say that the vast, vast, vast majority in
7	terms of open houses, public consultation, steps in
8	that process are almost consistent with the timber
9	management planning process.
10	MR. HANNA: Q. Mr. Pyzer, does the
11	public have any course of repeal or appeal, excuse
12	me, in terms of a decision that they find unfavourable?
13	MR. PYZER: Q. Yes.
14	Q. What is that, please?
15	A. You know, again, I don't have the
16	manual here in front of me. I can get it for you
17	but
18	Q. Who is it before, what tribunal?
19	A. Again, I don't have the manual in
20	front of me, but in terms of an appeal I don't know
21	whether that's to the you appeal to the Minister
22	himself or herself.
23	MS. BLASTORAH: Mr. Chairman, just a
24	point of clarification. Are we talking now about the
25	fisheries management plan or the timber management

1	plan?
2	MR. HANNA: Fisheries management plan,
3	Mr. Chairman.
4	MR. PYZER: Fisheries, yes.
5	MS. BLASTORAH: Again, Mr. Hanna may not
6	be going much beyond this, but I would just rise
7	because we seem to be getting deeper and deeper into
8	fisheries management planning which is not the subject
9	of this hearing.
10	THE CHAIRMAN: Well, that may well be,
11	but I think it is worthwhile to clarify what Mr. Pyzer
12	has said so as to perhaps obviate a whole line of
13	questioning in this area if in fact it is a different
14	process we are talking about.
15	MS. BLASTORAH: Certainly. That's why I
16	didn't rise before this.
17	THE CHAIRMAN: Well, I think we're all
18	going to rise now for a break.
19	MR. HANNA: Thank you, Mr. Chairman.
20	THE CHAIRMAN: 20 minutes. Thank you.
21	Recess taken at 2:40 p.m.
22	On resuming at 3:15 p.m.
23	THE CHAIRMAN: Thank you. Be seated,
24	please.
25	MR. HANNA: Mr. Chairman, I have tried to

adjust between witnesses and I've found that I have 1 been able to advance very quickly in the questions I've 2 asked so far this afternoon. It may well be that I 3 will be finished before the end of the day tomorrow. I 4 could be finished as early as one o'clock. 5 I just thought I'd bring it to the 6 Board's attention in the event that it is possible to 7 reschedule someone at that time. I realize I went too 8 9 far this time, I've tried to keep it as concise as I 10 could. 11 THE CHAIRMAN: Well, we have 12 re-examination with Ms. Murphy. Do you want to -- Ms. 13 Blastorah, do you want to -- are you re-examining on 14 this panel? 15 MS. BLASTORAH: Yes, Mr. Chairman. 16 THE CHAIRMAN: Oh, I am sorry. I am 17 sorry. 18 MS. BLASTORAH: I know it has been very 19 confusing between 12 and 13. 20 I have some concern for a number of 21 reasons and I am, like yourself, happy to hear that Mr. 22 Hanna is going to be less than projected, rather than 23 longer, but... 24 THE CHAIRMAN: Are we going to be happy 25 to hear that we may lose the afternoon?

1	MS. BLASTORAH: Well, I must say that the
2	whole panel has taken less time than we anticipated
3	and, as you are aware, there had been some concern that
4	Panel 15 is starting considerably earlier than we had
5	originally anticipated.
6	And I not only rise on my own behalf in
7	terms of my re-examination, but I know Mr. Freidin is
8	obviously not here today for good reason, he is busy
9	preparing to start Panel 15 Wednesday afternoon, and I
10	shutter to think how distressed he will be if I tell
11	him it is now Wednesday morning.
12	THE CHAIRMAN: Well, we certainly don't
13	like to be the harbingers of distress for anybody.
14	MS. BLASTORAH: Not to put all the blame
15	on Mr. Freidin, I certainly would ask that I still not
16	start my re-examination Wednesday morning because
17	obviously I won't have the transcripts from Mr. Hanna's
18	examination which will handicap me somewhat in my
19	preparation and I will require
20	THE CHAIRMAN: What about starting in the
21	evening?
22	MS. BLASTORAH: On Tuesday?
23	THE CHAIRMAN: If we took the afternoon
24	off?
25	MS. BLASTORAH: That would be a

possibility. The only reason I would suggest it might 1 2 not be necessary is that I have no expectation that I will be more than half a day. So I would have no 3 problem finishing Wednesday morning. 4 5 And if the Board accepts that it would be 6 difficult for Mr. Freidin to start before Wednesday afternoon with Panel 15, I can certainly undertake not 7 to be longer than Wednesday morning with the re-examination. 9 THE CHAIRMAN: Well, we will think about 10 11 that, okay? 12 MS. BLASTORAH: I will certainly make 13 every effort to prepare the re-examination as quickly 14 as possible on previous cross-examinations. 15 THE CHAIRMAN: There is a transcript of some comments I made to one of the local media after 16 17 last week's session dealing with this type of issue 18 that you or other counsel - although you were here for 19 the formal part of the comments, you might like to read 20 it at some point. It deals with the party coming next 21 and being ready to carry on so that we don't lose 22 hearing days. 23 Anyway, I will leave it out here for 24 anyone to cast their eyes on, if they wish. 25 MS. BLASTORAH: Mr. Chairman, as I

1 indicated, I do have some re-examination that I could 2 proceed with Tuesday evening. My only concern is that 3 it may be unnecessary to do that. 4 THE CHAIRMAN: Okay, we will deal with that perhaps later today or early tomorrow morning. 5 6 Thank you, Mr. Hanna. We always like to 7 hear that we are moving along quicker than anticipated 8 and we will take whatever steps are necessary to ensure 9 that following parties cooperate to the extent that we 10 save some overall time in this hearing. MR. HANNA: Q. Mr. Pyzer, before the 11 12 break you were going to examine Exhibit 16 and come 13 back with your comments. 14 Can we look on page 72, and I would ask 15 you first for your comments on the first sentence of 16 the last paragraph on that page. MR. PYZER: A. Sure. If you read it in 17 18 the context of that whole discussion, a couple of the 19 points that I would make -- and certainly Dean 20 Baskerville is not here so I'm having to read in what he meant. As I --21 22 O. Just before you continue, I don't 23 want your interpretation of what he meant, I want your opinion as a resource manager, your interpretation of 24 those words, your interpretation as part of your 25

1	personal your professional opinion as to now you
2	feel they apply?
3	A. Sure, but it's within the context
4	that he made the statement and I believe - and this is
5	what I was going to say - is that I believe he is
6	talking about forest management versus timber
7	management.
8	He's talking about planning in doing
9	forest management that you're doing all of and in
. 0	terms of optimizing benefits, he's talking about
.1	exactly what we were discussing prior to the break, and
. 2	that is that you would in fact - and this is where I
. 3	say I'm not sure what he meant by these terms - but as
4	I read them, he is saying that within the context of
.5	doing forest management you do fish management
.6	planning, you do wildlife management planning.
.7	And I'm suggesting to you that as the
.8	Ministry we do have these other resource management
.9	plans and that's why we call this document timber
80	management planning as opposed to forest management.
1	That would be the one thing I would say.
22	Secondly, he wrote this in 1986, and I
13	believe most of the work was done in '85, and that was
4	prior to things like the entire fisheries management
:5	planning exercise being initiated and being completed,

- and that's why, in terms of agreeing or not agreeing
  with his statement, is the context is totally
  different.
- We do have a fish management plan which
  is giving direction; we're not doing a forest
  management plan which is attempting to optimize all of
  these other programs because we have entire planning
  processes in place for them.

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- Q. So you're saying that what MNR does now bears a strong relationship to the substantial technical subject of optimization?
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  A. No, I'm not saying that. I'm just

  13 trying to give you the context within which -- you

  14 know, I understand exactly what he's saying and this is

  15 why I have some difficulty with it -- with some of the

  16 points in terms of optimizing.

You know, if you want a simple answer I can generally agree with what he's saying. I don't have a problem with that because I understand it within the context with which he said it and what we're doing today.

Q. Okay. Can we move then to the last sentence in paragraph 2 and perhaps -- I think that's been read into the record before, I don't think it needs to be read in again.

1	A. Yes.
2	Q. I would simply like to get your view.
3	Do you feel that optimization tools can greatly
4	facilitate the thinking process?
5	A. If you were doing it in the context
6	of forest management planning, yes.
7	Q. And the Ministry of Natural Resources
8	does not practice forest management planning; is that
9	what you're saying?
10	A. The title of this document is timber
11	management planning and there's a great distinction
12	between the two.
13	Q. Yes. And I'm asking you, where is
14	forest management planning practised by the Ministry?
15	THE CHAIRMAN: Well, hold on, hold on.
16	We are not going into the whole distinctions that we
17	ascertained at the outset of this hearing between
18	forest management an undertaking dealing with forest
19	management and an undertaking dealing with timber
20	management.
21	We canvassed that to some considerable
22	degree at the outset and we are looking here at the
23	impacts of timber management or activities concerning
24	timber resources on the other uses of the forest as
25	opposed to looking at the impacts from all other uses

1	of the forest.
2	MR. HANNA: Mr. Chairman, perhaps for my
3	clarification, it has come up before and it might
4	expedite things. Is that a decision that's been
5	reached by the Board or I'm just wondering, is that
6	not open for any further debate, is it a decision, a
7	ruling by the Board?
8	I'm trying to see I'm thinking
9	particularly in terms of my own case.
10	THE CHAIRMAN: Is what open for what?
11	MR. HANNA: These interpretations of what
12	is forest management and what is timber management,
13	whether you can separate the two, that whole I don't
14	want to open that ball or deal with that ball of wax
15	right now, but I'm asking: Are you suggesting that I
16	should not deal with that at all in my
17	evidence-in-chief?
18	THE CHAIRMAN: I'm suggesting that you
19	can deal in your evidence-in-chief or you can deal in
20	any of your cross-examinations with the impacts of the
21	timber management activities before this Board
22	centering upon harvesting, access, regeneration and
23	maintenance and how those activities might impact
24	against any other forest resources or uses?
25	MR. HANNA: Or how they might be planned?

- THE CHAIRMAN: How those activities 1 dealing with the timber management might be planned, 2 yes; the planning process dealing with them. 3 MR. HANNA: Right. The whole problem 4 of --5 6 THE CHAIRMAN: But we are not assessing 7 by way of an environmental assessment all other uses of 8 the forest. MR. HANNA: Yes, I appreciate that, Mr. 9 10 Chairman. 11 THE CHAIRMAN: To do so, firstly, would 12 create a problem in that this EA was prepared on an 13 entirely different basis; and, secondly, I would 14 venture to say if we did it the other way around; in 15 other words, looked at an environmental assessment of the entire uses of the forest, per se, we would never 16 17 finish this case. 18 Looking at one set of activities dealing 19 only with timber management may take this Board the 20 better part of two and a half or three years. And I 21 don't know about you, Mr. Hanna, but certainly for the 22 Board that is probably a sufficient length of time. 23 MR. HANNA: I think I have given my views 24 on the purgatory, Mr. Chairman.
  - Well, that helps. I think it is best for

1 us to leave that in terms of whatever presentation we 2 make at that time. Suffice it to say that the whole 3 concept of integrated resource management, in fact, as 4 the guiding rule in timber management planning does 5 complicate things somewhat. I will have to deal with 6 that later. 7 Mr. Ward, I'm back to the five inputs Q. 8 that we discussed right at the very outset of the panel 9 and the fifth one was the matter of environmental 10 costs. Do you remember that? 11 MR. WARD: A. Yes, I do. 12 0. Can you tell me how I would go about 13 using the evidence that you prepared to estimate the 14 environmental costs to the aquatic environment from 15 road construction? 16 A. I think it would be very difficult to 17 determine costs in terms of -- I think in terms of your 18 client group, I assume you are looking at what the 19 impacts would be on an angling fishery. 20 Just to clarify, Mr. Ward, the 21 Ontario Federation of Anglers & Hunters is not 22 concerned solely with angling and hunting, it's 23 concerned with the conservation of natural resources, 24 so it's a very broad --Okay. Well, the point is that we 25 Α.

talk about certain impacts like, for example, sediment
on the aquatic environment and it would be hard to
relate some -- the impacts on a resource that you don't
have a dollar value for. So I don't know. In terms of
environmental costs, I think it would be very difficult
to try and come up with cost figures.

- Q. What do you mean when you say we don't have a dollar cost on it? I wasn't quite certain of that.
- A. Well, it's -- you know, for example, you know, what's a population of Johnny Darters worth in a particular water body. I mean, how would you put a dollar value on it. We want them to continue to exist. If we lose them because we destroy their habitat, we've lost that population. What is the cost to society, how would you put a dollar value on it.
  - Q. Would I be able to use your evidence to predict if we were going to lose the Johnny Darter population?
- A. It's possible, yes. We are talking about some of the impacts that could have damage to the aquatic environment and depending on the magnitude of it and the frequency of it and so on, the impacts could possibly lose populations of fish certainly, stocks of fish.

1	Q. No, no, I don't think there is any
2	question, we all realize that that is a possibility,
3	that is why we are here.
4	A. Mm-hmm.
5	Q. I think the question is: How would I
6	go about predicting that? Taking the evidence that you
7	have brought forward on forest access roads, how would
8	I take the evidence that you have and use that to come
9	to some conclusion as to whether I might lose the
10	Johnny Darter population?
11	How would I predict that; how would I
12	apply it?
13	A. Well, again, you would have to look
14	at we are not even talking about the prediction of
15	the magnitude of the impact, we are just talking about
16	the potential effect of it. I think you would have to
17	get into a more site-specific thinking to start looking
18	at what the impacts are going to be and what the costs
19	would be.
20	Q. So your evidence would not be
21	applicable?
22	A. No, I don't think so.
23	THE CHAIRMAN: Mr. Ward, in the
24	formulation of the fishery guidelines, hasn't some of
25	that been taken into account for the protection of

critical fish habitat in the sense that any activity 1 are bound by the guidelines, particularly in the area of critical fish habitat, supposedly on the premise 3 that if you didn't abide by the critical fish 4 5 requirements for habitat you would in fact get into a 6 situation where the population of that particular fish 7 specie could be in jeopardy? 8 MR. WARD: That's right, mm-hmm. 9 MR. HANNA: Q. Mr. Ward --THE CHAIRMAN: So going back to your 10 11 question, Mr. Hanna, there has been some prediction, I 12 would suggest - and you might either deny or confirm 13 this, Mr. Ward - in formulating the rules or the 14 guidelines concerning critical fish habitat in the 15 first place--16 MR. WARD: Yes. 17 THE CHAIRMAN: --i.e., the necessity of 18 having to put those kinds of rules into place? 19 That's right, mm-hmm. MR. WARD: 20 MR. HANNA: Q. Is it your view, Mr. 21 Ward, that the application of the Fish Habitat 22 Guidelines will lead to no impacts on aquatic 23 eco-systems? 24 MR. WARD: A. The Fish Habitat 25 Guidelines?

1	Q. Yes.
2	A. Including the road guidelines as well
3	in that?
4	Q. Yes.
5	A. I think so.
6	Q. No impact?
7	A. Well, I don't know in terms of what
8	you define in terms of an impact that would have any
9	effect on the viability of stocks of fish. The intent
10	is not to destroy any fish habitat and maintain the
11	viability of all fish stocks.
12	Q. Did you not just tell me a moment ago
13	that that is a very site-specific issue that you can't
14	answer on a broad general basis?
15	A. Well, I think in terms of general, we
16	are talking about potential impacts and effects and we
17	are talking about the guidelines that are going to
18	minimize and mitigate those.
19	MS. BLASTORAH: Well, Mr. Chairman, I
20	think he's asked him two different questions. He asked
21	him, first of all, whether he could say what the
22	impacts would be, and Mr. Ward answered that question,
23	and then he asked him: Was he satisfied as a
24	professional that these guidelines would protect those
25	particular values, and he answered those questions.

1	But I don't think the second answer
2	relates back to the first question. I don't think
3	there is inconsistency there.
4	THE CHAIRMAN: Well, with respect Ms.
5	Blastorah, I think one of his questions was to the
6	effect that even if you applied the guidelines, both
7	sets, would there be any impacts on the fisheries, and
8	Mr. Ward's response was there may be an impact, but
9	certainly since the intent of the guidelines is to
10	maintain all viable fish populations, there wouldn't be
11	the type of impact expected that would cause a problem.
12	Is that essentially what you?
13	MR. WARD: Exactly.
14	MR. HANNA: Q. So if I can say then that
15	you expect there may be some impact but it's of such a
16	nature that it won't affect the viability of the
17	population; is that what you're
18	MR. WARD: A. That would be our intent,
19	yes.
20	Q. Would it affect the productivity of
21	the population?
22	A. You mean in terms of maximum
23	sustained yield, in terms of that term? I don't expect
24	it would affect that in terms of, you know, longer
25	term. There may be some short-term impacts, I don't

1	know.
2	Q. There may be some short-term impacts?
3	A. In terms of a construction activity
4	you may have some impacts that might occur in you
5	know, for like a growth rate of a fish stock may be
6	diminished in a certain one point in time in a year
7	or something, but it may recover when the eco-system
8	recovers or whatever, produces the same amount of food
9	maybe the same level of production later on.
LO	These are hypothetical things. It would
11	be hard to answer. I don't want to say either one way
12	or the another; it may or may not occur.
13	Q. But you had to answer them to decide
L 4	upon the appropriate
15	A. Right.
16	Qguidelines?
L7	A. Right. And that is and the answer
L 8	I gave you was that we should be protecting, we using
19	these guidelines, all critical fish habitat and the
20	productivity of different stocks of fish.
21	Q. I asked Mr. Pyzer if he had read
22	Exhibit 586 which is this Telman, Black and Victor
23	paper. Have you read it?
24	A. I don't believe I have. I've looked
25	at the transaction journal and I have read some of the

papers in there, but I don't know that one particularly 1 and I don't remember that one right now. I probably 2 have to look at the paper again to see whether I have 3 read it or not. 4 5 MS. BLASTORAH: Well, Mr. Chairman, I just have some concern. I don't want to interrupt Mr. 6 7 Hanna again, but given Mr. Ward has indicated that he 8 doesn't even remember whether he's read it or not, so I 9 think to put it to him at this time and attempt to question him on it, whether or not he may have read it 10 11 at some point in the past, I don't think it would be 12 fair to do that without giving him ample opportunity to 13 review it again. MR. HANNA: Mr. Chairman, I appreciate 14 15 Ms. Blastorah's objection. There is obviously some 16 validity in it. I am in a bit of a predicament 17 in that I flew in this morning, and I think the Board

appreciates that my client and I are under some considerable pressure to comply with the burden that this hearing puts on us, and I have not in any way attempted to, if you will, put the witness in an awkward position.

What I would suggest is that I have this article and two others that I will not go into in

technical detail and great death - there has to be a

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1	profound understanding of it - that I would suggest
2	that I put to the witnesses and let them look at it
3	over this evening and then I could ask the questions to
4	them tomorrow morning.
5	THE CHAIRMAN: Okay. Under the
6	circumstances, have you got anything planned for
7	tonight, Mr. Ward?
8	MR. WARD: I guess I do now.
9	MS. BLASTORAH: Mr. Chairman, I don't
10	have a problem with that, except insofar as the
11	witnesses are really the ones that have to decide the
12	level of understanding they have to have of the
13	articles in order to answer the questions.
14	And Mr. Hanna may feel he's asking
15	relatively superficial questions based on the article,
16	but obviously the witnesses
17	THE CHAIRMAN: Well, we won't get into
18	that in any event until tomorrow. So if you wouldn't
19	mind perusing the articles tonight, Mr. Ward, then you
20	can hold your questions until tomorrow morning.
21	MR. HANNA: Thank you, Mr. Chairman.
22	Q. Mr. Pyzer, I believe earlier you
23	mentioned that you had reviewed and commented on a
24	draft of the paper published also in that transcript
25	for that proceeding excuse me.

1	MR. PYZER: A. I'm sorry, I had
2	reviewed and commented on?
3	Q. I believe so. I believe you said
4	that the paper by Mr. Usher was reviewed by the
5	Ministry.
6	A. Oh yes, he prepared it for our
7	district well, he prepared the study report, the
8	major thick document and then, of course, when he
9	required our approval before he could have that
10	abstract printed, so he sent it up to us and said
11	he first asked us for our approval to submit it and
12	then, of course, when he wrote it he sent it up and let
13	us read it and said: This is what I am going to be
14	putting in, do we have any problems with it.
15	Q. Okay. I am going to ask you some
16	questions on that paper, if I might.
17	A. Again, I don't have it with me, if
18	you have got a copy.
19	MS. BLASTORAH: Mr. Chairman, may I just
20	ask Mr. Pyzer how long it is since he's had an
21	opportunity to review that and whether he feels
22	comfortable dealing with it without having an
23	opportunity to review it.
24	MR. PYZER: At least beginning to try and
25	be helpful, I will try and answer the questions right

1	now. It is almost ten years old.
2	MR. HANNA: Yes. (handed)
3	THE CHAIRMAN: Very well, Exhibit 807.
4	EXHIBIT NO. 807: Article entitled: Economics
5	Applications, Ontario Lake of the Woods Fishery: Economic and
6	Social Analysis, by A. J. Usher.
7	
8	MR. HANNA: Q. Now, perhaps, Mr. Pyzer,
9	before I ask you questions on this, just to put in
10	context why I am putting this forward - perhaps this is
11	as much benefit for the Board and other intervenors
12	also - is this deals with fisheries and while the
13	impacts of fisheries might be a substance of this
14	hearing; fisheries management, per se, is not.
15	The reason I want to bring this forward
16	is that, in my view, there are certain parallels
17	between some of the issues you are faced with in
18	fisheries management and timber management and I would
19	like to go through this and see if you agree with that.
20	So that is the essence. I don't want to
21	talk about fisheries management because that clearly is
22	not within the scope of this hearing. Okay.
23	Can we turn to page 353, please. Now,
24	the first full paragraph there starting with:
25	"The allocation of the Ontario Lake of

1	the Woods fishery"
2	MR. PYZER: A. Yes.
3	Q. That basically sets out, if you will,
4	resource allocation problems the Ministry is faced with
5	in respect to this fishery; does it not?
6	A. It was at that time, that's right.
7	Q. Yes, at that time. Now, the types of
8	issues here in terms of the players and their concern
9	about resource-based while this is fisheries many of
10	those could also be transferred to forest or timber
11	management; could they not?
12	A. Yes. Although, again, there is very
13	little competition for wood because that allocation has
14	been made.
15	Q. Yes, I appreciate that. I think in
16	terms of the spinoffs from timber management in terms
17	of the access problem, I am thinking particularly about
18	this panel in terms of road access, many similar type
19	problems.
20	A. Although that is significantly
21	different than the problem was here. Here we were
22	talking about the trees, if you will, and we were
23	talking about a large number of interests who in fact
24	believed they had a right to those trees. In this case
25	they happened to be fish, some believed they had an

1 aboriginal right, a treaty right; others crossed over a 2 boundary from the United States and believed that -- in 3 fact they told us they believed Lake of the Woods was a 4 giant state park and they had a right to those fish 5 because they had fished them forever. 6 That is significantly different from what 7 we are talking about in terms of forest, is 8 significantly different. 9 Q. Yeah, I agree with that. I think 10 what I am getting at is more the interaction of the 11 user groups. I appreciate that that, if you will, 12 ownership -- the difference in ownership concept, but 13 the matters of trying to resolve conflicting wishes of 14 user groups. 15 A. All right. Yes. 16 Now, in the following paragraph there Q. 17 is five objections -- or objectives of the study? 18 Α. Mm-hmm. 19 Q. Now, do you see those also being 20 relevant if you put that in a timber management 21 context? 22 A. You know, it really is difficult. It 23 really is difficult because we really are dealing with 24 apples and oranges here, but you would have to ask me

more questions because I can't draw too many parallels.

1	Q. Okay. Can we turn to page 363, then,
2	please.
3	A. 363?
4	Q. Yes, please. I would like you to
5	look at Table 2 there.
6	A. Yes.
7	Q. I think you are probably familiar
8	with it because it was included in the study from which
9	this was drawn; is that not correct?
10	A. That's correct, yes.
11	Q. As a resource manager do you find
12	this type of information useful in reaching decisions
13	on management alternatives?
14	A. Well, to some extent, yes, but the
15	first thing that catches my mind is where you see
16	below the table there it says:
17	"Table 2 is an "apples and oranges"
18	compilation"
19	And if you just quickly glancing
20	across that, you can see all of the problems that the
21	authors here are saying that they have:
22	"Due to study limitations, it had to be
23	assumed for evaluation purposes"
24	They even
25	"Because harvest changes in some basins

_	might be more extremeevaluating
2	alternative allocationstended to be
3	underestimated."
4	They themselves list all below here the
5	problems that they get into doing this, and then the
6	bottom line conclusion is we are dealing with apples
7	and oranges. But to the extent that you can compare
8	apples and oranges, that is what it shows you, yes.
9	Q. Is that not what resource management
10	is all about?
11	A. Yeah, sometimes.
12	Q. Is that not what makes resource
13	management challenging?
14	A. Sure is.
15	Q. By not doing this type of analysis,
16	can you avoid the assumptions that are listed in this
17	paragraph or is it simply you ignore them?
18	A. No. In fact this you know, don't
19	misunderstand me, that is why we did this study; it
20	provided us with some tremendous insights.
21	The dilemma, of course, is that we're
22	dealing with a commercial fishery on Lake of the Woods
23	that has been in existence for a couple of hundred
24	years and if you look at it from a purely economic
25	perspective you can say: Geez, there's no reason why

there should be a commercial fishery on Lake of the Woods.

And if you want to deal with it in cold, hard economic terms, you can say: Sure, the sport fishery is worth ten times, but forgets about the fact that there have been commercial fishermen on the lake for five and six generations, that's -- and you can't deal with it callously.

Sure it's a value, but the immediate thing -- what we did after this was in fact allocate that resource to the commercial fishermen to say that on a willing seller/willing buyer, if we want you off the lake we will buy you off.

And certainly that is the direction that we are moving toward, but we are not saying that anyone is out of a job. We recognize that there is some social benefits there, as the authors themselves even indicated in terms of spinoffs, they could not determine how important it was for -- you know, when you look at the economics there on that table.

And that is why they are saying it's so difficult here: What is the value in this restaurant tonight if you go and have walleye for dinner at the restaurant downstairs. That wasn't computed into these figures because they had difficulty looking at spinoff

- benefits and multiplier effects and secondary effects
  and so they were cautious.
- But nevertheless, yes, by and large when
  you look at it in economic terms tourism angling is
  more important from the kind of gross economic terms
  than is commercial fishing, but you have to be careful
  when you say that.

- And then, of course, there are political considerations that, regardless of the fact that sport fishing may be economically more important, politically people -- the government is prepared to say: We will have a commercial fishery on the lake.
  - Q. Mr. Pyzer, just to make it clear, I am not here trying to debate whether or not it should be commercial or sport fishing on Lake of the Woods.
    - A. I am not either.
- Q. I am really more interested in the methodology, rather than --

THE CHAIRMAN: Well, Mr. Hanna, that is exactly I believe what Mr. Pyzer is dealing with, he's dealing with the fact that you can have economic hard data, but you have to take into account some of these other things, and that's the methodology that the Ministry uses and it's not enough just to put everything and try and plot it out economically.

1	Is that the gist of your testimony?
2	MR. PYZER: Exactly.
3	MR. HANNA: Q. Does not the far right
4	column provide a summary of, if you will, non-economic
5	factors?
6	MR. PYZER: A. That's correct. The far
7	right if I remember this correctly, the far right is
8	dealing with social benefits as opposed to economic;
9	that is my understanding and recollection, on the
10	far right is not a summation of the left, it's that it
11	deals with those things that you could not quantify, so
12	you talk about the importance of those sorts of things
13	that I was talking about, the intrinsic values.
14	So, again, I stand to be corrected here,
15	but I don't believe the far right is summarizing those
16	six or seven columns on the left, I believe it's
17	summarizing the social benefits as opposed to the
18	economic.
19	Q. Right, that is my interpretation
20	also. What I was simply saying was, the left-hand side
21	is, if you will, the hard economics
22	A. Mm-hmm.
23	Q the right-hand side is these other
24	soft things which you described?
25	A. Yeah.

1	Q. So they are both presented there?
2	A. That's correct.
3	Q. Is it your view, Mr. Pyzer, that
4	public consultation in resource management decisions is
5	important, be it fisheries management or timber
6	management?
7	A. Yes, absolutely.
8	Q. Can we turn to page 364, please. I
9	think it's probably easier the last paragraph on the
10	right-hand column describes how the report was used in
11	terms of public consultation; does it not?
12	A. That's correct. That is the author's
13	opinion, yes.
1.4	Q. Could you read the last sentence in
15	that paragraph that starts with:
16	"Some of the suggested"
L7	A. "Some of the suggested management
18	directions were implemented, but
19	generally only those most in keeping with
20	current managerial thinking were pursued
21	and implementation was more often by
22	administrative fiat than a result of
23	public discussion."
24	Q. Has there been a drastic change in
25	the Ministry since this article was published in 1987?

1	A. Absolutely.
2	Q. Can we look at the last paragraph,
3	the last sentence and I ask you to read that, please,
4	starting with:
5	"Yet social scientists"
6	MR. PYZER: A. I am sorry, page?
7	Q. 365.
8	A. 365.
9	Q. The last sentence in the article
10	before the acknowledgements.
11	A. "Yet social scientists and resource
12	planners can help the political process
13	work better by laying out the available
14	policy options and their global and
15	distributional impacts in the clearest
16	possible terms for the benefit of those
17	making the ultimate decisions."
18	Q. And I take it you would agree with
19	that?
20	A. Absolutely.
21	Q. Would you agree that quantitative
22	expressions of global and distributional impacts is
23	clearer than subjective terms?
24	A. I am sorry, would you repeat that?
25	Q. Is it your view that quantitative

1 descriptions of global and distributional impacts 2 provide a clearer description than subjective, 3 narrative terms? 4 Usually that is true if you can do 5 that, but certainly not always. And, again, I go back 6 in this case to that commercial fishing issue and, if 7 you want -- you know, if you want to pursue: Did in 8 fact we take it to the ultimate decision-makers, I can 9 assure you we do. I don't think I can tell you what the 10 11 Minister of Natural Resources told me and our staff, 12 but I can tell you --13 I can probably imagine. 0. 14 I can't tell you, but I wouldn't be Α. sitting here today before you had I done some things. 15 16 Q. Mr. Ward --17 MR. WARD: A. Mm-hmm. 18 Much of your evidence on this panel Q. 19 deals with the environmental effects of erosion and 20 sedimentation on water quality and fish habitat; is that correct? 21 22 A. That's correct, yes. 23 I believe you were here in Panel 7 Q. 24 and I believe -- when you were here in Panel 7 -- when

you were here in Panel 7, Mr. Williams discussed with

you a letter that you wrote to the letter of the North 1 American Lake Management Society Newsletter; is that 2 3 correct? 4 Α. That's right. 5 There is a number of other pieces of correspondence that went with that; is that not 6 7 correct? 8 You mean the article itself in the --9 Well, I don't believe the article was 0. 10 ever entered into evidence. 11 Α. No. Is that what you are referring 12 to? 13 Q. Yes. 14 Α. Yeah. 15 MR. HANNA: Mr. Chairman, I would like to 16 enter the article and the response to that. 17 (handed) 18 THE CHAIRMAN: Thank you. Exhibit 808. 19 ---EXHIBIT NO. 808: Article entitled: Rationale for forest reserves around lakes, 20 published in Lake Line, Vol. 3(2). 21 THE CHAIRMAN: Mr. Hanna, are you 22 distributing what, a letter as well? 23 MR. HANNA: Yes. There is two items go 24 with it, Mr. Chairman. 25 THE CHAIRMAN: The letter dated October

1	14th, 1983 will be Exhibit 809.
2	EXHIBIT NO. 809: Copy of letter to Ms. Judy Taggart (Editor) Lake Line from J.E. Hanna, dated October 14, 1983.
4	MS. BLASTORAH: How many copies of that
5	
	did you provide to the panel? It may be that both Mr.
6	Pyzer and Mr. Ward would like one.
7	MR. HANNA: Oh sure.
8	Q. Now, Mr. Ward, Exhibit 367 was your
9	letter to the editor. I just want to confirm that your
10	letter to the editor related to Exhibit 808 which is an
11	article that you wrote in Lake Line; is that correct?
12	MR. WARD: A. Yes, my letter was in
13	response to your letter to the editor regarding my
14	article in Lake Line, right.
15	MS. BLASTORAH: Mr. Chairman, that
16	article which is Exhibit 808 was in fact part of
17	Exhibit 367.
18	THE CHAIRMAN: Well, thank you, Ms.
19	Blastorah, but we will keep it with a separate number
20	for this part of the testimony.
21	MS. BLASTORAH: Fine.
22	MR. HANNA: Q. 809 is my letter
23	regarding your article which you responded to with your
24	letter?
25	MR. WARD: A. That's correct.

1	Q. The conclusions that you reached in
2	your article in Lake Line in Exhibit 808, are they
3	still valid today in terms of the impacts of forestry
4	activities and particularly those of erosion and
5	sedimentation on fish?
6	MS. BLASTORAH: Mr. Chairman, that exact
7	question was asked by Mr. Williams in Panel 7. At
8	transcript page 9802 and 9803 he referred Mr. Ward to
9	the document which is now Exhibit 808 and asked him:
10	"Could you advise the Board what your
11	professional opinion was at the time that
12	you wrote that letter?"
13	And Mr. Ward answered that, and then he
14	went on to say:
15	"If this hearing was held"
16	Oh, I beg your pardon, it may be that
17	I would have to review the transcript in some detail.
18	I know there was some discussion of that document and
19	Mr. Ward's opinion of it. I may have been premature.
20	THE CHAIRMAN: This may be a question
21	that doesn't take much time, even if it was earlier
22	dealt with.
23	MR. HANNA: Mr. Chairman, maybe for the
24	witness' benefit and for the panel, I have read that
25	transcript quite carefully. I believe the questions

1	put to Mr. Ward at that time was with respect to the
2	aquatic surveys that were being done and whether or not
3	they were adequate to make decisions at this point, and
4	I believe Mr. Ward responded to that and said that his
5	opinion had not changed and that it was the same now as
6	it was in '83, and I believe he went on to say that
7	that it had in fact been dealt with in the timber
8	management planning process through the minimum
9	information requirements in the Fish Habitat
10	Guidelines.
11	That was, if you will, the context of
12	that line of questioning that took place and that is
13	not the line of questioning I wish to pursue at this
14	time.
15	MS. BLASTORAH: Mr. Chairman, I may have
16	been premature. Obviously I haven't had a chance to
17	review it because I wasn't aware we were going to be
18	discussing it.
19	THE CHAIRMAN: Okay. Well, let's get on.
20	Go ahead.
21	MR. HANNA: Q. Do you remember the
22	question, Mr. Ward?
23	MR. WARD: A. You asked me about the
24	impacts or whether my feelings are the same about the
25	impacts of sediment on the aquatic environment.

1	Q. Well, I will read it again. Are the
2	conclusions you reached in this paper still valid today
3	in terms of the impacts of timber management activities
4	and particularly the impacts related to erosion and
5	sedimentation on fish?
6	A. Well, the potential impacts are still
7	the same in terms of, you know, for example, Figure 2
8	where it says that:
9	"As fine sediment in a spawning bed
10	increases, the alvan or the fry emergence
11	declines."
12	I mean, those kinds of impacts are still
13	valid. There isn't anything there that would change in
14	terms of you know, in terms of five years since I
15	wrote this.
16	But since then we've developed and
17	this is one of, you know, the concerns I've had in the
18	past and one of the reasons why I got involved with
19	developing the road guidelines, to try and minimize the
20	amount of sediment that's entered into the
21	watercourses. Is there any specific
22	Q. Yes, I am just
23	Aquestion that you want on this?
24	Q. I think it's easier to take it one
25	step at a time. I really want to know if there is

1	something you are violently opposed to now that you had
2	written in 1983?
3	A. I'd probably have to read it all
4	again, but just scanning it I don't think there's any
5	that I'm violently opposed to right now.
6	Q. All right. In your witness statement
7	on page 42, paragraph 43.
8	MS. BLASTORAH: What paragraph?
9	MR. HANNA: 43.
10	Q. Now, you indicate there that the
11	occurrence of sedimentation can be prevented or
12	mitigated; is that correct?
13	MR. WARD: A. That's correct, by using
14	the following practices outlined in various guidelines
15	and manuals.
16	Q. And prevented means that no impact
17	whatsoever occurs; is that correct?
18	A. That's correct.
19	Q. And mitigated means there is some
20	impacts occur but they are reduced?
21	A. Generally, yes.
22	Q. And to decide upon the appropriate
23	level of reduction one must make some sort of
24	priorization in terms of, if you will, the value of the
25	resource versus the cost to mitigate?

1	1	A. Yes, that's true.
2	Ç	Q. And would you agree that's a very
3	site-specific t	type decision?
4	1	A. Yes.
5	9	Q. Can we look at the graph on page 3,
6	it is in Figure	e 1. There are three graphs there, I
7	would like to	look at the one in the middle, it's on
8	fish production	n.
9	1	A. Right.
10	(	Q. Now, my reading of that graph is
11	that my inte	erpretation of this graph is that, if you
12	will, every pie	ece of sediment that gets into the
13	waterbody has	some impact, it's a clinal response; is
14	it not, it's no	ot a threshold response?
15	1	A. Yes, as you read that graph.
16	Ç	Q. Is that your view of how fisheries
17	respond to turk	pidity?
18	1	A. I think on a general sense that may
19	be occurring, h	out there is also natural erosion in
20	turbidity and	you'd have to look at the system and the
21	site-specific o	conditions for that to occur.
22	ŗ	This is something produced by U.S.
23	Department of A	Agriculture and it's more of a general
24	type of relation	onship for a whole bunch of different
25	probably fisher	ries that they looked at in the United

1 States. 2 But if we had this sort of a graph it 3 is very useful to predict what different levels of 4 mitigation might result in? 5 That's possible, yeah. The main 6 impact in terms of turbidity as it increases would 7 probably be on photosynthesis of -- because they're 8 basically talking suspended sediment there when you're 9 talking turbidity and, therefore, you are reducing the 10 amount of light penetration and, therefore, the amount 11 of -- sort of the primary production that occurs in a 12 waterbody, and if you reduce that you would expect a 13 fish being further down the food chain to be reduced in 14 terms of --Q. So that exhibits itself in fish 15 16 production? 17 A. Right. 18 All right. Are you aware of 0. 19 techniques available to predict the consequences of 20 those types of changes? 21 You mean as turbidity increases you 22 get fish production declining? 23 Q. Yes, changes in photosynthesis and, 24 therefore, fish production decline. 25 A. Well, I'm aware of some literature

1	that talks about that, yes.
2	Q. So in arriving at your conclusion
3	that sedimentation impacts can be mitigated, implicit
4	in that is a tradeoff, if you will; in other words, an
5	appropriate level of mitigation?
6	A. Yes, so that the impact wouldn't be
7	causing, you know, declines in fish production.
8	Q. You wouldn't go too far down that
9	line?
10	A. That's right, mm-hmm.
11	Q. Have you ever used the universal soil
12	loss equation?
13	A. I haven't used it at all.
14	Q. You're aware of it?
15	A. I've heard of it, yes.
16	Q. Could it be applied in this type of
17	situation?
18	A. I don't know. I wouldn't want to
19	speculate on that, whether it could be or not. I don't
20	know the limitations of that equation and
21	Q. How did you decide what was an
22	acceptable level of mitigation when you were working on
23	the guidelines for environmental protectection I
24	haven't got the appropriate words, but
25	A. On the road guidelines?

1	Q. Yes.
2	A. Well, basically our approach is to
3	minimize the amount of sediment going into the stream.
4	I would like to have a zero discharge if it was at all
5	possible. I think there are very and I think that's
6	the intent from an engineering point of view too, they
7	want to keep this sediment further on the road and not
8	going into the stream. And I think that was Mr.
9	Adamson's evidence, that good engineering is good
10	environmental practice as well and I would agree with
11	that.
12	So I think in some cases and, as well,
13	you'd have to look at natural background levels in the
14	stream to see what impacts are.
15	I believe in the Ministry of Environment,
16	even with turbidity, one of their water quality
17	criteria is not to exceed it by 10 per cent turbidity
18	levels from water quality and we'd certainly you
19	know, that's a kind of objective from a water quality
20	viewpoint we would want to try to achieve as well. I
21	can't say here that we're
22	Q. I don't disagree with what you've
23	said, but you would agree with me that mitigation costs
24	money?
25	A. It could, it depends on how in

some ways it may not cost any money. For example, one of the main mitigation techniques we talk about in the quidelines are to leave the trees right up to the roadbed and don't cut the trees, like, narrow the right-of-way width as you approach the water, so you don't have, you know, the big drainage ditches running directly into the watercourse and taking sediment with it.

And I was asked -- I saw a picture of one of the members on our committee that helped develop the road guidelines, the industry fellow representing -- from Algonquin, and he showed me a picture of a bridge where the trees were in tact in all four corners.

And I said: Well, it must have cost you a bit more money to install that bridge because you got -- you know, in terms of moving your machinery around, and he actually told me, he said he thinks it cost less because they didn't have to remove the trees.

So, you know, to just make a general statement that mitigation costs money, I think generally probably is true, but there are exceptions where it may not and, in some ways, as Mr. Adamson testified earlier, that you do it right up front it's going to cost you less in the long run.

So some mitigation techniques for keeping

1	sediment on site and not having ditch erosion starting,
2	which may affect the integrity of the roadbed later on,
3	may in the long term cost you less.
4	Q. Would you agree that the acceptable
5	level of mitigation is likely to vary substantially
6	across the area of the undertaking based upon the
7	nature of the waterbody and various other things?
8	A. Yes, and depending on the soil,
9	erodibility of the soil, exactly.
10	Q. Is it your view that the public has a
11	major role to play in deciding what level of impact is
12	acceptable or, conversely, what level of mitigation is
13	necessary?
14	A. I believe so, yes.
15	Q. Can we turn to page 4 of your
16	article, Exhibit 808.
17	A. You said page 4?
18	Q. Yes. Oh, I'm yes, it's page 4.
19	Yes, it's the second page of the exhibit.
20	A. Okay.
21	Q. And I'm looking at the second
22	paragraph under Figure 4, it starts with:
23	"Water crossings"
24	A. Yes.
25	Q. It speaks specifically to the

- 1 substance of your evidence here?
- 2 Yes, it does.
- 3 Now, how did you decide on the conclusion that you reached there that additional 4 5 control techniques such as diversion berms and filler
- 6 cloths might be necessary?

20

21

- 7 Well, that's based on what I observed 8 in the field. Basically there were some water 9 crossings that should have had those types of 10 mitigation techniques employed to keep sediment on the 11 land and -- the soil on the land and the sediment out 12 of the water.
- 13 And how -- I appreciate, I think, you 14 know, that we are all faced with those sort of 15 problems, but how do you know that filler cloths and 16 diversion berms would be adequate; in other words, give 17 sufficient protection to the resource that I think you 18 are very concerned about?
- 19 A. Well, again, I guess it's depending on the site-specific nature of it in terms of slopes and soil and erodibility, and I think in terms of road 22 builders, as they get start using these road guidelines 23 and get more experience with the different techniques, that we will know what techniques are most effective 25 for certain situations.

1	Q. Now, in your witness statement and in
2	this article you referred to the article by Mattice?
3	A. Yes.
4	Q. And I assume it's an article?
5	A. Right. And I added and it was
6	also added or appended to my evidence package.
7	Q. Correct. Have you gone back in an
8	attempt to analyse Mattice's results to determine
9	whether the proposed techniques with the new guidelines
.0	would provide adequate protection, at least for those
.1	examples that he looked at?
.2	A. Do you mean, did I go back and look
.3	at the sites mentioned in Mattice's article?
. 4	Q. Yes.
.5	A. No, I haven't. But whether you think
.6	that I feel that some of the erosion concerns that
.7	Mattice had mentioned, whether the road guidelines
. 8	if the road guidelines were used at that time, whether
.9	they would alleviate a lot of the erosion concerns
20	or sites that Mattice had seen, I think the road
21	guidelines would have minimized or mitigated a lot of
22	those examples.
23	I don't know how many of them were
24	actually near water, how many he looked at, he looked
5	at all of them I guess along the whole roadway But

certainly in some of the sites that were near water, I 1 would expect using the road guidelines would 2 minimize -- provide mitigation for that erosion. 3 Q. You have raised an interesting point 4 here. You have indicated in Mattice's results that 5 6 erosion did not occur only at water crossings; is that 7 correct? 8 A. Mm-hmm, I believe that's right. 9 There were other sites. Q. The erosion that Mattice looked at 10 11 was water erosion; was it not? 12 A. You mean surface erosion, like 13 runoff, is that what you're talking about? erosion 14 caused by --15 Q. I'm talking about the examples that 16 Mr. Mattice included in his document? 17 Mm-hmm. Α. 18 0. Those were water erosion? 19 As opposed to wind erosion? Α. 20 Wind or mass movement or whatever? 0. 21 Right, right, right. Α. 22 Erosion problems related to roads not 23 at water crossings, can they have impacts on the 24 aquatic environment?

A. If you include water crossings with

1	wetlands and that type of thing, I would say no,
2	because normally it doesn't go very far, and normally
3	is revegetated and stabilized, so it's a shifting of
4	soil from one area to another, like a certain cut slope
5	it goes from the road would slope down into a basin
6	beside the road or something like that and it fills up
7	with sediment.
8	The trouble with when you're next to
9	water crossings is if it goes in the water, the water
10	takes it away from that site and moves it downstream
11	and has impacts, it doesn't stay and settle out there.
12	Q. Mr. Adamson, the time for erodible
13	material to settle out of suspension, is that a
14	function of particle size?
15	MR. ADAMSON: A. Yes, it is.
16	Q. Could fine particles travel for long
17	distances in suspension?
18	A. Yes, they remain in suspension longer
19	I think.
20	Q. So as an engineer, is it conceivable
21	to you that erosion not at a water crossing would
22	result in runoff with higher suspended solids loads
23	entering a watercourse?
24	A. Not necessarily, it depends on where
25	that storm water runoff goes.

1	Q. I didn't say necessarily, I said is
2	it possible?
3	A. Is it possible? Near a watercourse,
4	yes, runoff turbid runoff could enter the
5	watercourse.
6	Q. And the distance over which that
7	impact is likely to be felt would be a function of the
8	particle size of the native soils?
9	. A. Particle size, the slope of the
10	ground, the vegetative cover that might be on the
11	ground.
12	Q. Thank you. Mr. Ward, have you
L3	undertaken any monitoring or pilot-skilled tests or
14	predictive analysis even to confirm that the proposed
L5	level of mitigation in the guidelines is adequate?
16	MR. WARD: A. In terms of the road
L7	guidelines, we've some of the mitigation techniques
L 8	have been installed, and in terms of direct observation
L9	in the field to see whether that erosion is continuing
20	or whether sediment is still entering the watercourse,
21	we've observed that hasn't occurred so that the
22	technique has worked.
23	Q. When you say observed; is this, if
24	you will, a windshield survey type of thing, or are you
25	talking about a controlled experimental study?

1	A. No, I am talking about going you
2	know, getting out of the vehicle, and not necessarily
3	looking through the windshield, and seeing if there is
4	any gully erosion or rill erosion or that type of thing
5	implying that erosion is still occurring.
6	I mean, you have to assume if you are
7	near a watercourse and you can't see where the sediment
8	has entered up that has entered the water, in some
9	cases you can see where it has entered and it may be
10	deposited in the water and you can see, you know, areas
11	that are covered with sediment
12	So if you don't see that kind of thing, I
13	am assuming that the erosion techniques are working. I
14	don't need to necessarily set up sediment traps and
15	that type of thing to prove whether sediment is still
16	coming off the site.
17	Q. When you make those comments, Mr.
18	Ward, you are speaking about the coarse fraction of any
19	material that might be eroded; is that correct?
20	A. Well, and also fines, because if you
21	get some fines moving, I think you would see rill
22	erosion on the site, you would see some evidence of
23	eroding soils.
24	Q. Which sites is it that you are basing
25	your opinion on?

1	A. Probably several sites that I have
2	looked at in northwestern Ontario.
3	Q. Can you be more specific?
4	A. Paintpot Creek on English River Road
5	is one example, probably the Confusion River is
6	another. Mr. Adamson probably has some other ones
7	because he is the major, you know, one of our road
8	builders and he's working with industry and road
9	builders to implement these techniques.
10	Q. And just for future reference,
11	Paintpot Creek and Confusion River, are there only one
12	crossings there, so if I wanted to go out and look at
13	those sites, those are very
L 4	A. Yes.
15	Qthat's sufficient direction for me
16	go
L7	A. On the English River Road, yes, you
L8	would able to find that. And if you want to have
19	somebody arrange to visit those sites with you, I'm
20	sure it can be arranged.
21	MR. CASSIDY: Can you find Confusion
22	River?
23	MR. HANNA: It's confusing.
24	MR. WARD: And I also should mention that
25	some of our monitoring programs will be discussed in

1 Panel 16. 2 MR. HANNA: No, I appreciate that. Thank 3 you. 4 Mr. Chairman, how late are you planning on sitting this afternoon? I don't want to terminate 5 6 now, but I am quite prepared -- I have spent quite a 7 bit of time getting this prepared, and I would like to 8 deal with this as quickly as possible and it might be 9 useful to take maybe 10 minutes for me just to ... 10 THE CHAIRMAN: Okay. Why don't we take 11 the late afternoon break at this point. MS. BLASTORAH: Mr. Chairman, could I 12 13 just get some projection as to how long Mr. Hanna expects he will be. 14 15 As I understood this morning, I was to 16 attempt to have re-examination ready to go tomorrow 17 evening, if that's required, and I think that I can do that, but I would just like to know where I am going to 18 19 stand this evening. 20 MR. HANNA: Mr. Chairman, can I respond to that after the break? 21 THE CHAIRMAN: Okay. We will take 20 22 23 minutes. 24 --- Recess taken at 4:20 p.m. 25 ---On resuming at 4:50 p.m.

1	THE CHAIRMAN: Be seated, please. We
2	have got an empty chair.
3	MR. HANNA: It's going to be full
4	shortly, Mr. Chairman.
5	MS. BLASTORAH: Mr. Chairman, perhaps
6	just before we get started, I mentioned to you at the
7	break that the issue of scheduling a scoping session
8	for Panel 16 had not yet been addressed and just so it
9	doesn't slip my mind, I was wondering if I could raise
10	that now.
11	I know that time is getting short and
12	with the Dryden community hearing coming up people wil
13	be at various locations and so on, so I was suggesting
14	that perhaps if we could set a date as soon as possibl
15	for the other parties to have their statements of issu
16	in, perhaps it might be possible to schedule the
17	scoping session before the Dryden hearing.
18	If, for instance, we could ask the
19	intervenors to have their statements of issue in on
20	Tuesday, which is our next sitting day, or Monday, we
21	might be able to schedule the scoping session the end
22	of next week.
23	THE CHAIRMAN: Well, that doesn't leave
24	them much time for the ones that haven't yet got them
25	in. I'm not sure from Mr. Mander what we've received

1	to this point.
2	MS. BLASTORAH: My understanding is we
3	haven't received any. I don't believe any date was
4	set, that's the problem.
5	THE CHAIRMAN: No, but to set a date
6	for well
7	MS. BLASTORAH: Well, perhaps then we
8	could set the date for receiving the statements of
9	issue the end of next week, that might be more
10	reasonable, and set the scoping session itself
11	immediately after the Dryden hearing.
12	THE CHAIRMAN: I think that would
13	probably be more reasonable for some of the parties who
14	aren't in attendance on a full-time basis.
15	MS. BLASTORAH: We certainly want
16	meaningful statements of issue and so I don't want to
17	attempt to set it too soon.
18	THE CHAIRMAN: All right. So why don't
19	we direct that the date for submitting statements of
20	issue when is your statement of issue getting in,
21	your statement of issue is actually part of the witness
22	statement.
23	MS. BLASTORAH: That's right.
24	THE CHAIRMAN: So that's already in.
25	All right. All the other parties will submit their

statements of issue --1 MS. BLASTORAH: Perhaps by September 14th which is next Thursday. Would that be --3 MR. CASSIDY: No, that's this Thursday. 4 MS. BLASTORAH: Oh, that's this Thursday, 5 6 I beg your pardon. THE CHAIRMAN: Well, that would be the 7 21st would be the following Thursday. 8 MS. BLASTORAH: Yes. 9 MR. CASSIDY: I would suggest the 25th, 10 11 Mr. Chairman. It just enables us to have a day in Toronto on the 22nd. 12 13 THE CHAIRMAN: All right. That sounds 14 reasonable. So let's have them submitted by the 25th 15 of September and then the Board will schedule a scoping 16 session some time that week when we get back. 17 --Discussion off the record 18 THE CHAIRMAN: All right. We will try 19 and set the scoping session for the 4th of October or 20 at the latest the 5th, but the statements of issue 21 should be in by September 25th. 22 MS. BLASTORAH: Thank you, Mr. Chairman. 23 THE CHAIRMAN: And we will have Mr. 24 Mander send out a notice to the parties listed. 25 MS. BLASTORAH: Thank you.

1	MR. CASSIDY: A small detail. Inasmuch
2	as you will be in Dryden on September the 25th, could
3	Mr. Mander simply indicate the parties are to forward
4	their statement of issue to the Board at their offices
5	in Toronto.
6	THE CHAIRMAN: Very well.
7	MS. BLASTORAH: And just for
8	clarification, my recollection was that the original
9	Board's order required those to be served on the
10	Ministry or the parties, I am not just sure what the
11	detail was, but I know that there was some confusion
12	the last time because some of the statements of issue
13	went to Mr. Mander only and we didn't receive them.
14	THE CHAIRMAN: Well, it is certainly the
15	Board's intention that the statements of issue should
16	be distributed amongst the full-time parties, the
17	parties receiving full-time correspondence, the Board
18	and the Ministry as well.
19	MS. BLASTORAH: That was my recollection.
20	I just wanted to make that clarification.
21	MR. CASSIDY: I refer you to your order
22	regarding the statement of issues on November 25th,
23	1988, paragraph 2(a) states indeed that:
24	"All parties are to serve their statement
25	of issues on all other parties receiving

1	full-time correspondence and file a copy
2	with the Board."
3	THE CHAIRMAN: Right.
4	MS. BLASTORAH: Thank you, Mr. Chairman.
5	MR. HANNA: Mr. Chairman, I have had an
6	opportunity to briefly go over my cross-examination.
7	At this time - and now I have had some experience with
8	this panel, the types of answers that I think I can
9	expect - I think it is reasonable to be finished by one
10	o'clock tomorrow. That would be my best estimate at
11	this time.
12	THE CHAIRMAN: Okay. And have you had
13	any opportunity, Ms. Blastorah, to speak with Mr.
14	Freidin?
15	MS. BLASTORAH: Mr. Chairman, I have
16	conveyed the message that we are certainly speeding up
17	over here to our office over there, and I can advise
18	from my point of view I can be ready with some
19	re-examination tomorrow.
20	Certainly I can't guarantee that I will
21	be able to complete tomorrow frankly, because obviously
22	I will have to request some time to prepare
23	re-examination based on tomorrow morning's cross and
24	given that I had projected a half day re-examination, I
25	can certainly do some tomorrow night, whether or not I

1	can complete my cross-examination
2	THE CHAIRMAN: Well, we are not going to
3	sit tomorrow night if in fact you are not going to
4	finish tomorrow, and in fact Mr. Freidin isn't prepared
5	to go on first thing Wednesday morning.
6	If it's a matter of losing tomorrow
7	afternoon or losing Wednesday morning, then I think we
8	would sit Wednesday morning.
9	MS. BLASTORAH: I think
10	THE CHAIRMAN: And then have Panel 15
11	commence immediately after lunch. And that's based on
12	the premise that you are going to finish Wednesday
13	morning.
14	MS. BLASTORAH: Certainly I will
15	undertake to be not more than half a day in
16	re-examination.
17	At this point I frankly can't speak for
18	Mr. Freidin, whether he could be ready to go Wednesday
19	morning, but at this point perhaps it would be best to
20	leave it until tomorrow morning so that after reviewing
21	Mr. Hanna's cross-examination from today I can have
22	some better sense of whether I could undertake to
23	complete tomorrow and, again, that would depend on what
24	time I could get started.
25	THE CHAIRMAN: Okay.

MR. HANNA: Mr. Chairman? 1 THE CHAIRMAN: Mr. Hanna, under the 2 circumstances, how much longer do you want to go today 3 in order for you to finish by one o'clock tomorrow? 4 MR. HANNA: I would suggest we go to 5 5:30, twenty to six, something like that, Mr. Chairman. 6 7 THE CHAIRMAN: Very well. MR. HANNA: That's what I was 8 9 anticipating. 10 THE CHAIRMAN: Okay. 11 MR. HANNA: Mr. Chairman, there was one 12 matter that came up in my discussions with Mr. Pyzer 13 and I have now had a chance to discuss with my client, and I would ask that Mr. Pyzer provide me with greater 14 15 clarification of this and that is this matter of the 16 opportunity for public appeal to an independent body 17 with respect to fisheries management. THE CHAIRMAN: Well, he didn't indicate 18 19 necessarily it was an appeal to an independent body, he 20 indicated that his understanding in the fisheries 21 planning process that there was an appeal to somebody, 22 it might well be to the Minister or an official of the 23 Ministry, but he didn't indicate clearly that it was to 24 and independent body.

Now, certainty it isn't to this Board as

1	the independent body, to my knowledge.
2	MR. HANNA: Yes, I understand. No, I
3	don't think it is to this Board to my knowledge either,
4	Mr. Chairman. I guess what I would like is if I could
5	simply get clarification of that appeal process,
6	because I believe it does have some bearing on the
7	nature of
8	THE CHAIRMAN: Well, I believe that's
9	contained in the Fish Management Guidelines and
10	certainly, Ms. Blastorah, you could undertake to
11	provide a copy of those guidelines if Mr. Hanna doesn't
12	have them.
13	MS. BLASTORAH: I think we can arrange
14	for that. I am not sure how quickly I can get it here,
15	but Mr. Pyzer can perhaps comment on that.
16	MR. HANNA: It is not something I need
17	right now, Mr. Chairman. I am quite willing to wait.
18	It is just simply a matter I would like to get
19	clarified at some point in the future.
20	MS. BLASTORAH: I think I prefer to deal
21	with it that way because obviously that is not the
22	subject of this hearing, that appeal procedure, that
23	might be more expeditious.
24	THE CHAIRMAN: Okay. Very well.
25	MR. HANNA: Q. Mr. Ward, I would like to

the independent body, to my knowledge.

1	continue on with this Lake Line article if you would,
2	please. I'm looking on page 4, the second last
3	paragraph. Perhaps it's best if you just read that
4	first sentence in that paragraph, the one that starts
5	with:
6	"As governments progress"
7	MR. WARD: A. "As governments progress
8	towards more integrated resource
9	management, watershed management will be
10	required to fully reconcile the
11	objectives of fish, wildlife and forestry
12	programs."
13	Q. Are you still of that view?
14	A. Basically I am, yes.
15	Q. The governments that you are
16	referring to, would that include the Ministry of
17	Natural Resources?
18	A. Certainly.
19	Q. Now, the timber management planning
20	process that is before this Board at the present time,
21	is there a watershed planning framework that's used in
22	that to the best of your knowledge?
23	A. No.
24	Q. So it would not respond to the type
25	of thing the statement you have made here?

1	A. Not in terms of watershed, no. They
2	have a different unit for their area in terms of timber
3	management plans. For fisheries, of course, I am more
4	interested in the watershed.
5	Q. I can understand that. You will
6	agree with me that the reason that watershed planning
7	it very important from a fisheries and aquatic point of
8	view is because of the cumulative nature of aquatic
9	system impacts?
10	A. Exactly.
11	Q. Are you aware that the matter of
12	cumulative environmental impact of forestry is a matter
13	of extensive discussion currently in other
14	jurisdictions?
15	A. Yes, I am. In terms of you are
16	talking about things like the Carnation Creek studies
17	done in British Columbia, is that the point you're?
18	Q. That is certainly one example of a
19	watershed study in looking at forestry practices.
20	A. Right.
21	Q. Now, that Carnation Creek that you
22	referred to that in fact was, if you will, somewhat
23	comparable to the Hubbard Brook type situation that we
24	have heard reference to here before?
25	A. That's correct.

1	Q. So it is a scientific monitoring
2	site?
3	A. Exactly.
4	Q. As opposed to a planning type
5	A. Right. And that will be more of the
6	focus of discussion for Panel 16.
7	Q. Are you aware of responses by other
8	jurisdictions not just in terms of collecting the
. 9	scientific data, but also in terms of modifying their
10	planning process to deal with cumulative impacts?
11	A. You mean in terms of some of the
12	processes the U.S. Forest Service is going through
13	right now?
14	Q. Certainly that would be an example.
15	A. I know some of it, yes.
16	Q. Now, in the current timber management
17	planning process, how do you see these types of
18	cumulative impacts being dealt with in terms of I am
19	just dealing with the aquatic environment here?
20	A. Well, we are trying to avoid any
21	impact occurring, so we hopefully won't get any
22	cumulative impacts. Like, in downstream we are looking
23	at maintaining water quality and that's our Fish
24	Habitat Guidelines sort of addresses that.
25	With the waters that we are to look at

- and be concerned with and in terms of our water

  crossing guidelines, they would -- all water crossings

  would be -- the guidelines would apply to all our water

  crossings. So hopefully we don't get any impacts on

  any particular site and we don't get a cumulative

  impact downstream.
- Q. Do you know if the U.S. Fish and

  Wildlife -- or the U.S. Forestry Service have

  environmental guidelines comparable to those used by

  the Ministry of Natural Resources?
- 11 A. In terms of the road guidelines?

  12 Q. Yes.

- A. I'm aware of some of the guidelines that have been produced. One of the first steps that we took in terms of developing these guidelines was to canvass or at least obtain copies of other guidelines from other jurisdictions, and actually I had written, I think in about 1983, to all the states and provinces asking for any copies of their guidelines regarding their roads and water crossings and we used some of that material that I have got to help develop our road guidelines.
  - Q. And yet they still are moving forward in terms of dealing with cumulative impacts despite the presence of those guidelines; is that not correct?

1	A. I am not sure of that.
2	Q. Mr. Ward, just for your reference,
3	one of the articles that I will be tendering here at
4	the end of the day deals in fact with this very issue.
5	A. All right.
6	Q. So I think what I will do is I will
7	let you read that and then perhaps we can pursue it
8	further.
9	A. Okay.
10	Q. Now, you mentioned that you sent
11	letters to all provincial agencies and federal agencies
12	in Canada and U.S. or a large number of them?
13	A. Mm-hmm. We didn't get responses from
14	all of them. We must have got about a dozen or so
15	responses and copies of guidelines from other
16	jurisdictions.
17	Q. Did you make a request to Ontario
18	Hydro?
19	A. We had some discussions with some
20	provincial agencies, I don't know whether Ontario Hydro
21	specifically, I know MTC, we talked to them extensively
22	on road building. I don't remember if we got anything
23	from Ontario Hydro.
24	Q. Do you have any knowledge of the
25	predictive tools used by Ontario Hydro to assess the

1 aquatic environment impacts of Hydro right-of-way water 2 crossings? 3 Α. No, I can't say I am. I may have looked at some documents but I can't remember whether 4 5 I -- that particular one. 6 Would you expect that there would be 7 similarities between equipment and materials being 8 moved through streams through construction of a Hydro 9 right-of-way and during construction of a forest access 10 road? I couldn't -- I would expect them to 11 12 be different, but since I don't really build roads and 13 I don't build right-of-ways, I am not the person to ask 14 the question. 15 Mr. Adamson, would you? MR. ADAMSON: A. I would expect that 16 17 right-of-way construction would be different than 18 building access roads. There is perhaps not a 19 long-term need for a crossing of the river, it's more 20 or less to get in to build the structure initially, 21 however, the maintenance is done with all-terrain 22 vehicles and checking is done with helicopters and 23 things. 24 Certainly this past summer there has been some access road construction by Ontario Hydro in our 25

area and we have made it a condition of approval that 1 they follow these guidelines here and they have agreed 2 3 to do so. Q. But in terms of the actual impacts, I 4 5 appreciate and I understand that you use these 6 guidelines for Hydro right-of-ways in addition to 7 forest access roads, but in terms of the types of impacts -- at least the short-term impacts - and I am 8 9 speaking here of erosion and sedimentation - you can 10 get erosion and sedimentation whether it's a machine 11 working on a Hydro right-of-way or a forest access 12 road? 13 Α. Oh yes, the potential is there. 14 And you could have the same -15 perhaps, Mr. Ward, you are better to answer this 16 question - and you could potentially have the same 17 types of impacts in terms of removal of vegetation, 18 loss of shading and those types of effects? 19 MR. WARD: A. That is true. 20 Mr. Ward, I would like to obtain your 21 comments on several things in Exhibit 809, and can we 22 look at the last sentence on the first page. I am 23 sorry, on the last paragraph. Excuse me, I am sorry. 24 MR. WARD: A. On the first page?

Q.

The last sentence on the first page,

1	please, yes.
2	A. Where it starts with:
3	"No mention"
4	Q. Yes. Now, do you interpret this
5	criticism as being the lack of a connection between
6	timber harvesting and forest access, the suggested
7	fisheries impacts, and the effectiveness of the
8	mitigative measures which are recommended in your
9	article which are forest reserves?
10	MS. BLASTORAH: Mr. Chairman, I just want
11	to clarify something. This Exhibit 809 is a letter
12	from Mr. Hanna. Is he asking Mr. Ward to interpret
13	what this comment is intended to mean?
14	MR. HANNA: Mr. Chairman, I think
15	obviously it's a bit of a difficult position to be in
16	asking the witness I was not intending to ask the
17	witness what my interpretation of the letter I wrote
18	was.
19	What I was intending is to ask how he
20	interpreted it, and the reason I am asking that
21	question is that he actually responded to this letter
22	in Exhibit 367, and I want to determine how he
23	interpreted that letter that sentence in then
24	referring to Exhibit 367.
25	THE CHAIRMAN: Okay. It's fair game.

1	MR. WARD: I am just going to have to
2	read a little bit more than just that last
3	THE CHAIRMAN: Well, you may have to also
4	refer to Exhibit 367.
5	MR. WARD: That is what I want to do as
6	well.
7	THE CHAIRMAN: Do we have 367 up here?
8	MR. HANNA: It was on the list, Mr.
9	Chairman.
10	THE CHAIRMAN: It was on the list.
11	MR. HANNA: (handed)
12	MR. WARD: Okay. Your question was
13	regarding that last sentence?
14	MR. HANNA: Q. Yes. I want to know if
15	you interpreted that as being a criticism, lack of
16	connection between timber harvesting and forest access,
17	the suggested fisheries impacts and the effectiveness
18	of the mitigative measures which are recommended in
19	your article which is Forest Reserves Around Every
20	Lake?
21	MR. WARD: A. Well, basically, I when
22	I read that just re-read that sentence, I thought
23	your comment was referring to there hasn't been a
24	quantitative relationship between harvesting and the
25	generation of sediment, erosion just from harvesting.

And my reply was saying that we cannot separate logging roads from timber harvest and I know, because you need the roads to get the timber out, and some of the studies - and I believe Ms. Seaborn asked me and cross-examined last week that the -- is my main concern with water crossings sediment generation and does it make more of an impact than harvesting and I agreed with that. 

And some of the literature that I have in my evidence also speaks to that as well, that there is probably more sediment generated from water crossing road building than there is from actual harvesting and I think generally from what I have seen that has occurred.

And I think in terms of my comment that the time before we had Fish Habitat Guidelines approved and the fisheries branch policy for using minimal information approved, there was a concern on my part that we were going to allow shoreline cutting all over the place and, if we did do that, then we might see more erosion and sedimentation along the shorelines of lakes and it may be, in some cases, equal or more so than what we are getting from water crossings.

So that is why I made that comment.

Q. What evidence do you have for

1	developing that opinion?
2	A. Just my field observations and what I
3	have read in some of the literature too, that would
4	support what I have observed in the field.
5	Q. And that literature is referenced in
6	your witness statement?
7	A. Yes, somewhere. Yeah.
8	Q. Now, can we turn to Exhibit 367,
9	please. I am looking at the first paragraph in your
10	letter.
11	A. Mm-hmm.
12	Q. And specifically the last sentence.
13	Could you read that, please.
14	A. That is: "However"?
15	Q. Yes.
16	A. "to properly evaluate these
17	impacts would probably cost more than the
18	timber and the reserves were worth
19	especially if other users such as
20	wildlife and tourist operators were
21	included."
22	Q. Do you still hold this position
23	opinion?
24	A. Well, I know in terms of the
25	monitoring program it's to evaluate some of the

1 impacts, is going to cost a fair bit of money and I 2 think Panel 16 will talk in terms of the scope of that, 3 the monitoring program. 4 I know our Ministry has proposed that as 5 a term and condition and we are looking at that. And 6 in terms of the timber in reserves, I would think, 7 again, it would have to be a site-by-site type of 8 thing. In some cases the timber may be worth more but, 9 in other cases, I think the study itself is going cost 10 more than what you can get out in terms of timber 11 reserves. Are you suggesting that these studies 12 Q. 13 be required on every site? 14 A. No, we are not, I am not suggesting 15 I am just -- we are going to be doing, you know, 16 some studies or monitoring program over selected areas 17 to be representative of the area of the undertaking and 18 the fisheries values that are there. 19 Q. Well, doesn't your opinion here 20 really hinge on the word properly? Yes. It does. 21 Α. 22 What do you mean by properly in this Q. 23 context? 24 Well, I am talking probably long-term Α. 25 studies, it's not something you can go out and evaluate

1	in a year or anything. I am talking about doing some
2	before to get some to know what the natural
3	ecosystem there is natural variability in the
4	eco-system, so we are talking probably three to five
5	years of baseline monitoring to find out what natural
6	variability is occurring and then you do your
7	perturbation, you do your cutting of the shoreline and
8	then it takes probably five or six years to evaluate
9	the impacts, especially if you are going to look at the
10	impacts on the fish of a population because it may
11	take, you know, five, six, seven years before those
12	fish that may be impacted at the fry or egg stage, you
13	will see it reflected in the angling fishery.
14	So it's a long-term study and also there
15	is a lot of variables to consider in terms of slope,
16	soil types, types of machinery used to get a really
17	good evaluation of what the kind of impacts you would
18	expect.
19	So that is why you are right, properly
20	is probably why I was looking at that in terms of cost.
21	Q. And given how you have just defined
22	properly, you are still of the view then that this
23	would cost more than the timber is worth?
24	A. In those reserves. I am not saying
25	in terms of the timber in all the area of the

1	undertaking, just in terms of the reserves. We are
2	talking, you know, 30 to 90 metres of standing timber
3	and if we are looking at trading that off to try and
4	get the information to say we are going to need those
5	reserves, I am just wondering from, you know, a total
6	provincial budget perspective whether it's worth it or
7	not.
8	THE CHAIRMAN: As opposed to just leaving
9	the reserves in place?
10	MR. WARD: Right, exactly.
11	THE CHAIRMAN: You are not suggesting for
12	a moment that you do the cutting without the
13	appropriate studies?
14	MR. WARD: No, I am not, no.
15	MR. HANNA: Q. No, I think the point
16	maybe I didn't interpret your article properly. When
17	you said a reserve around every lake, I interpreted
18	that, and I believe your terminology is actually used
19	somewhere, is a doughnut.
20	MR. WARD: A. Yes, that's term that's
21	being referred to, yes.
22	Q. Now, the Fish Habitat Guidelines
23	don't propose doughnuts?
24	A. No, they don't. But we also propose
25	that you have a certain amount of information before

you give up the doughnut so you know where your
critical fish habitat is, you know what fish species
are present.

Q. But you won't be able to do the prediction until you have done these proper studies that you have referred to in your letter, you don't know -- you're right, isn't what you have just told us in the description is that we really don't know right now what we have whether that will be adequate?

A. We don't know whether the guidelines are adequate to protect the values we think they are protecting, that is true, that is why we are proposing a monitoring program.

I think, in general, the gut feeling from the literature and everything, developing the guidelines, that if you use them you will be protecting, but we want to monitor and evaluate it.

Maybe we are tying up too much timber, it works the other way as well, maybe we don't need as much timber as we say we do to protect the values we need.

So the forest industry, of course, is interested in that angle. And I am looking and interested, maybe we need more timber to protect the values. I would like to know that.

Q. This raises a question I am sure that

1	you face on a daily basis in your job as a biologist
2	and; that is, what action to take in the face of
3	uncertainty, the absence of adequate information and
4	yet a decision has to be reached at that particular
5	moment. It's a problem you face regularly?
6	A. Yes, it has been, yes.
7	Q. Do you find that
8	A. Before you answer the question or
9	ask the question, the fish policy in terms of minimum
10	information helps solve some of that quandary that
11	district biologist and regional biologist are facing.
12	Q. Right. There is two types of
13	problems you are faced with; the one is knowing what
14	resource is there to be impacted?
15	A. Mm-hmm.
16	Q. The second is to know how the
17	activity will impact on that resource?
18	A. Yes.
19	Q. I am really dealing with the latter,
20	and I appreciate the minimum information policy and I
21	can say from the Federation of Anglers & Hunters point
22	of view that is probably one of the reasons why we have
23	adopted to support the Fish Habitat Guidelines.
24	But we still have this problem of trying
25	to make that gap between the activity and the impact on

1	the resource. Now, what I am asking you: In the face
2	of that sort of a situation facing that type of
3	situation, do you find systematic analysis using the
4	best available literature is often very useful?
5	A. Certainly in reading the literature
6	and understanding what kind of impacts have occurred
7	with different, you know, harvesting, road building,
8	scarification and so on you can it doesn't take too
9	much imagination or thought to realize that those
10	impacts could occur as well in Ontario.
11	Q. Well, it becomes very complex. I
12	think you have said over and over, and the Board has
13	heard it on regular occasions, it's a very
14	site-specific type of situation?
15	A. Yes.
16	Q. Every situation is different?
17	A. Yes.
18	Q. So you have got this problem of
19	trying to take a general type of feeling and apply it
20	to a site-specific situation?
21	A. Yeah, but basically we are lumping
22	most of the timber management activities, whether it is
23	harvesting or whatever, we have got to protect
24	critical fish habitat, we are talking about
25	establishing a reserve and the same would apply for

1 scarification. So we sort of -- you know, I don't know 2 whether we really have to know that, you know, 3 harvesting will have a greater or lesser impact, for 4 example the sediment generation, than scarification if 5 it's occurring both on that site. 6 We would put a reserve up to protect that 7 critical fish habitat from timber harvesting from scarification, from prescribed burning or whatever. 8 9 That is the purpose of it, we want to maintain the 10 reserve for that purpose. But to know whether that reserve is 11 0. 12 adequate and I am back to this cause/effect sort of a 13 thing --14 A. Right. It's very hard to know if you haven't 15 0. 16 either got historical experience that you can draw on, 17 scientific imperical type of data, or some kind of 18 predictive analysis; is that not correct? 19 That's true, mm-hmm. But I think our monitoring program is going to be looking at the 20 21 different types of timber management activities and 22 looking at those impacts and, therefore, the need of 23 different types of mitigation because you may be able to have harvesting to the shoreline in some cases with 24 no scarification as a condition. 25

1	Right now we are basically saying, you
2	are not going to have any harvesting, you are not going
3	to have any scarification because we have got a reserve
4	in place.
5	So we are looking at it from that point
6	of view as well and there is different types of
7	scarification you could use that may have less of a
8	water quality impact than others.
9	THE CHAIRMAN: Is it the case, Mr. Ward,
LO	that whenever you do put in a mitigative or
11	preventative measure, as part of the guidelines, you
L2	are working towards the worst-case scenario of the
13	various activities you are looking at?
14	MR. WARD: Exactly, mm-hmm.
15	THE CHAIRMAN: And, therefore, you
1.6	automatically catch the less than worst-case scenarios?
L7	MR. WARD: Right.
L8	MR. HANNA: Q. What do you mean by
19	worst-case in that situation, Mr. Ward?
20	MR. WARD: A. Well, just the example I
21	gave, for example, that maybe some forms of
22	scarification that may generate cause more sediment,
23	like erosion and resulting sedimentation in a water
24	body than, for example, harvesting; if you harvest and
25	you leave the duff layer in tact and that type of

1 thing.

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- Q. Okay. But that's the worst-case in terms of the activity? Are you talking about worst case in terms of soil type, sediment delivery ratios, slopes, you take the worst of all of those?
- 6 A. Well, certainly our guidelines 7 address the concern with slopes. So that, you know, 8 you have more of a reserve the steeper the slope. We 9 haven't -- you know, we acknowledge the fact that there 10 is different erodible type soils and that if you can --11 some soils are more erodible than others and, 12 therefore, in a situation where you want to protect 13 critical fish habitat from sediment you are going to be more cautious I believe in applying the guidelines when 14 15 you have those erodible soils than in cases where you 16 may not.
  - Q. But back to the Chairman's question, are you saying you have taken the most erodible soils in developing those guidelines?
  - A. Yes, I think, because we don't really go out, you know, and the districts apply the guidelines. We don't really look at doing soil surveys and that type of thing. The information is basically just slope and we assume it's erodible soil and, therefore, we are going to have the reserve width based

1 on slope.

Q. Now, my understanding is that the guidelines in fact that's referred to in your letter were developed primarily on Trimble and Sartz work in 1957; is that not correct?

MS. BLASTORAH: Mr. Chairman, I'm sorry to interrupt, but I am just wondering if we are eventually going do get to something to do with roads. We have been through the development of the fish guidelines in extensive detail through a number of the panels, and I hate to interrupt Mr. Hanna again, but I think we have been through a lot of this material before and certainly if he has specific questions in relation to roads, I have no problem with that, but I am just wondering if we could maybe get to that now.

MR. HANNA: Mr. Chairman, I am trying to deal with the impacts of roads; I would also raise another - and I think the questions are quite relevant to that - I would also raise a point and; that is, Mr. Ward was not here when the guidelines were discussed and I intentionally held these questions because I felt it was much better to talk about his article, the author, when the author was here rather than try and ask someone else what their interpretation is of someone else's article.

1 MS. BLASTORAH: Well, Mr. Chairman, as we 2 already pointed out, Mr. Ward was here in Panel 7 and 3 the Fish Habitat Guidelines were discussed at that time 4 as was this article. 5 Now, granted it was by Mr. Williams and 6 Mr. Hanna has indicated he reviewed the transcript. 7 So, again, with regard to those general questions, I think both the guidelines and the article have been 8 9 discussed by Mr. Ward and subsequently by Dr. Allin. 10 MR. HANNA: Mr. Chairman, I can tell you 11 that my client is trying to avoid to the highest extent 12 any redundancy in this hearing and trying to expedite

to the greatest extent possible.

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In that spirit I went through the transcripts carefully to ensure that none of the questions I am asking are redunant with any of the questions that have been asked of Mr. Ward or other members of the proponent's case prior to this time, and I have intentionally done this because I felt this witness was the person who would give us the most direct and straightforward answer, and I would submit, as I think I have already shown, that this article deals not only with timber harvesting in a general way but in a very specific way with water crossing and logging roads.

1	THE CHAI	IRMAN: Well, let's	$i \in \mathbb{Y}^{d}$
2	with a few more questi	ions in this area 🖔	٠,٠٠٠٠٠.
3	I think	we will probably e	\$ = 1 · · · · · · · · · · · · · · · · · ·
4	more time arguing abou	it whether or not yo	1
5	asking the questions t	than hearing the que	207
6	eliciting the answers.		
7	So let's	s move along and I	: *
8	solve any problem that	Ms. Blastorah mig	е
9	get the answers, even	if some of them are	:
10	repetitious. They may	y not be.	
11	MR. HANN	NA: Q. I was deali	
12	Trimble and Sartz, Mr.	. Ward.	
13	MR. WARI	D: A. Mm-hmm.	
14	Q. Is i	it not true that Tr	7
15	was one of the primary	y bases for deciding	:
16	of the buffer zones in	n the Fish Habitat	
17	A. That	is true, mm-hmm.	
18	Q. Can	you tell me the soi	
19	was present in Trimble	e and Sartz' study	
20	A. I do	on't know it off the	
21	head, no.		
22	Q. So y	you don't know whet	
23	worst case possible in	terms of soil typ	
24	A. That	c's true. But, agri	
25	the main author of the	e guidelines either	

the main author for that.

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2 I think in terms of the guidelines as 3 well that the more conservative width of reserve -- in 4 Trimble and Sartz, I think he talked about a municipal 5 watershed which is more concerned with water quality 6 and he had another category - I forget what he called it - but I believe that Dr. Allin -- that we took the 7 8 more conservative measurement for slope to make sure 9 that we would trap most of the sediment or all of the 10 sediment in that standing timber or that vegetation.

I would have to double check and go back for the years as we evolved. The first draft of the guidelines came out in 1981, we've had many drafts since then and much discussion, comment over that time.

MR. HANNA: Mr. Chairman, it might be an appropriate time to break. I still have some questions for Mr. Ward, but I think I can be much more efficient in the use of my time if I spend some time this evening in...

THE CHAIRMAN: Very well. Would a nine o'clock start accommodate you for around one?

MR. HANNA: Oh. I thought you said round

1. I'm sorry. Yes, Mr. Chairman, that would

accommodate me to complete by one o'clock.

MS. BLASTORAH: I think that is round 2.

1	THE CHAIRMAN: Okay. We will adjour	rn
2	until nine clock tomorrow morning.	
3	Whereupon the hearing adjourned at 5:30 a.m., treconvened on Tuesday, September 12th, 1989, commencing at 9:00 a.m.	to be
5	commencing at 5.00 d.m.	
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